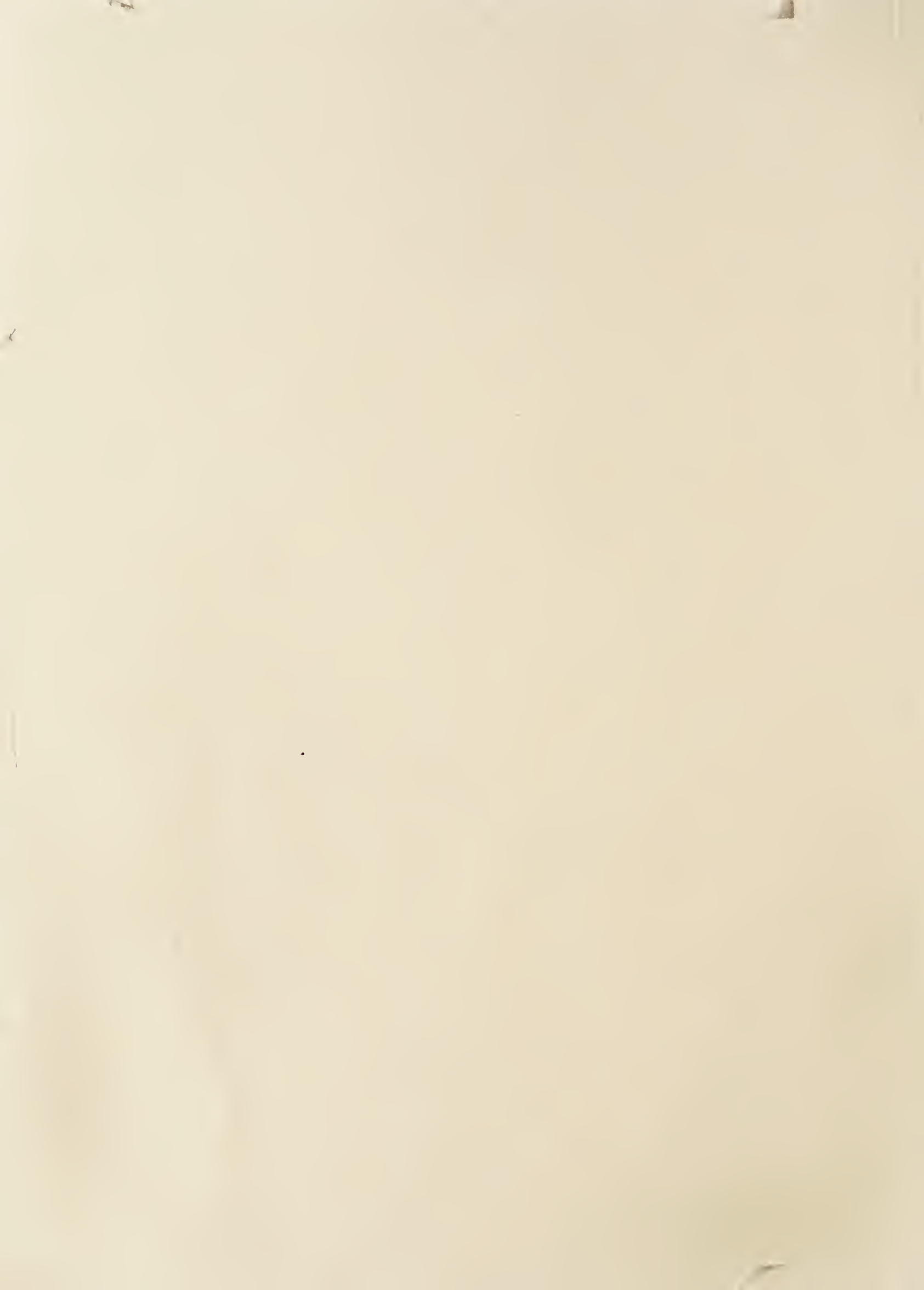


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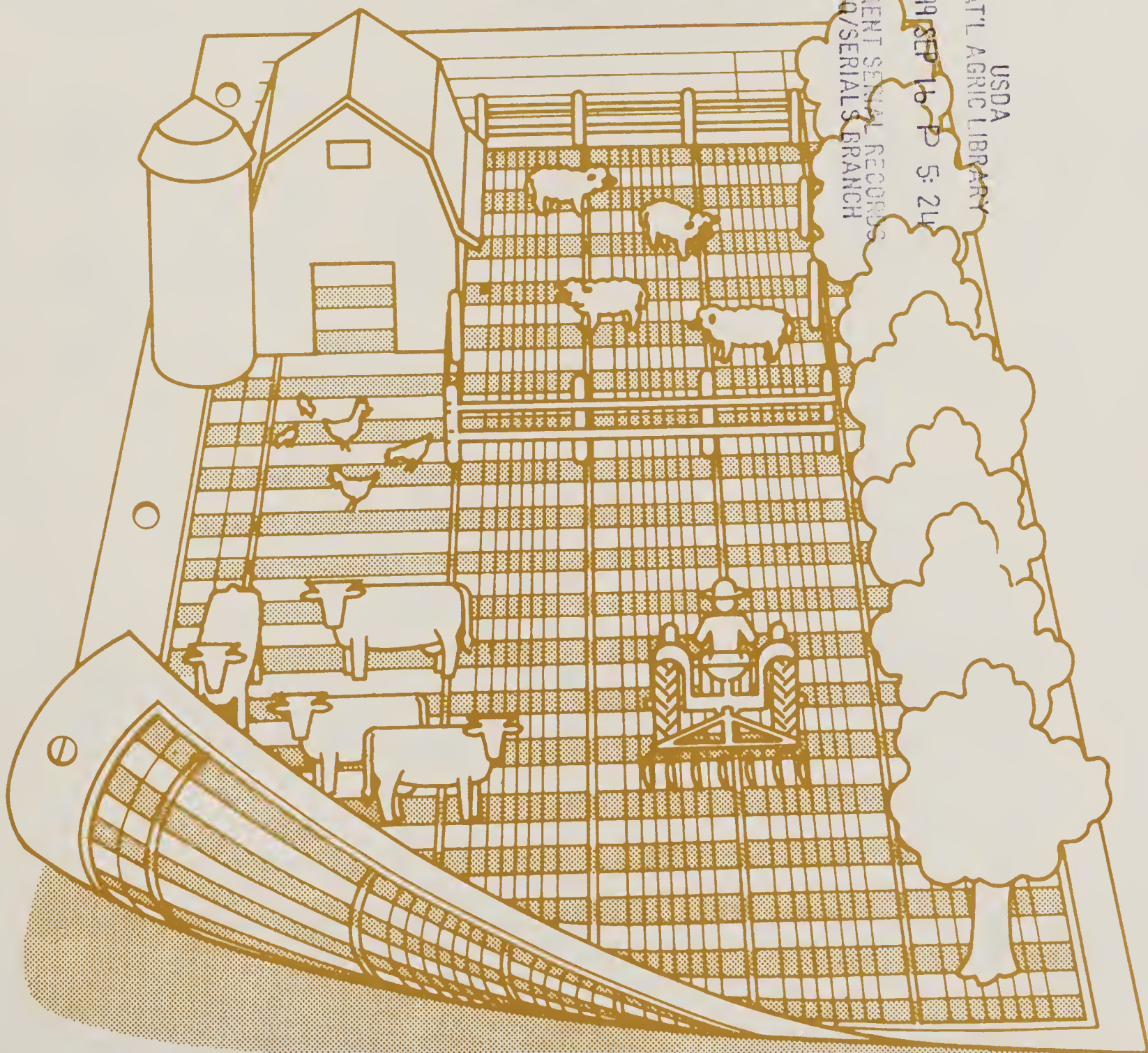
Economic Indicators of the  
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# Costs of Production-- Livestock and Dairy, 1990

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**Economic Indicators of the Farm Sector: Costs of Production--Livestock and Dairy, 1990.** Commodity Economics Division, Economic Research Service, U.S. Department of Agriculture. ECIFS 10-5.

### **Abstract**

Changes in costs of production for dairy and other livestock enterprises ranged from -0.4 percent for farrow-to-finish operations to 17.7 percent for feeder pig finishing in 1990. Feed costs and interest costs declined slightly, but general farm overhead expenses increased in 1990. Net cash returns for milk and hogs improved in 1990. Returns for beef cattle and sheep continued to decline.

**Keywords:** Costs of production (COP), costs and returns, feed costs, enterprise budgets.

### **Preface**

This is one of five reports in the annual *Economic Indicators of the Farm Sector* series; others are *Costs of Production--Major Field Crops*, *National Financial Summary*, *State Financial Summary*, and *Production and Efficiency Statistics*.

This report contains enterprise cost estimates for 1989 and 1990 for dairy and 1988, 1989, and 1990 for other livestock as well as time series data beginning in 1972. The 1990 estimates are preliminary and the 1989 estimates have been revised.

The methodology pertains only to livestock and dairy enterprises in estimating livestock and dairy costs of production. This report is prepared by staff of the Livestock, Dairy, and Poultry Branch, Commodity Economics Division, Economic Research Service.

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# Economic Indicators of the Farm Sector

## Costs of Production-- Livestock and Dairy, 1990

### 1990 Production Costs and Returns

---

The U.S. Congress, through the Agriculture and Consumer Protection Act of 1973, requires the Secretary of Agriculture to estimate annual costs of producing wheat, feed grains, cotton, and milk. The Economic Research Service (ERS) carries out this mandate and also determines costs for rice, peanuts, soybeans, flax, sunflowers, fed cattle, beef cow-calf, hogs, sheep, and sugar.

This report presents national and regional estimates of livestock production costs and returns for 1988, 1989, and 1990, and milk production costs and returns for 1989 and 1990. This report also furnishes cost-of-production results of the 1989 Farm Costs and Returns Survey (FCRS) for dairy for the first time.

The cost-of-production (COP) estimates are in the form of enterprise budgets with three sections: cash receipts (gross value of production), cash expenses, and economic costs. Estimates are weighted averages of enterprise costs across all operations within each region and across the Nation. The effects of Government programs are included implicitly through their effects on prices and total enterprise expenditures. For example, Federal emergency feed programs were made available to dairy and livestock producers in 1989 in response to the 1988 drought. However, expenditures associated with the emergency feed programs were not separately identified from total feed expenditures. Explicitly, Government programs appear in this report only in dairy assessments, wool, and unshorn lamb payments.

The estimates are not designed to represent any specific producer nor are they economically engineered to be "typical" of specific types of livestock operations. Further, they do not reflect "best management" practices suggested in most farm management extension planning budgets. Individual farms may have different production costs and returns due to the mix of inputs and yield unique to a given farm. The estimates do reflect the national and regional average costs and returns of milk and livestock production.

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## Enterprise Highlights From 1988 to 1990

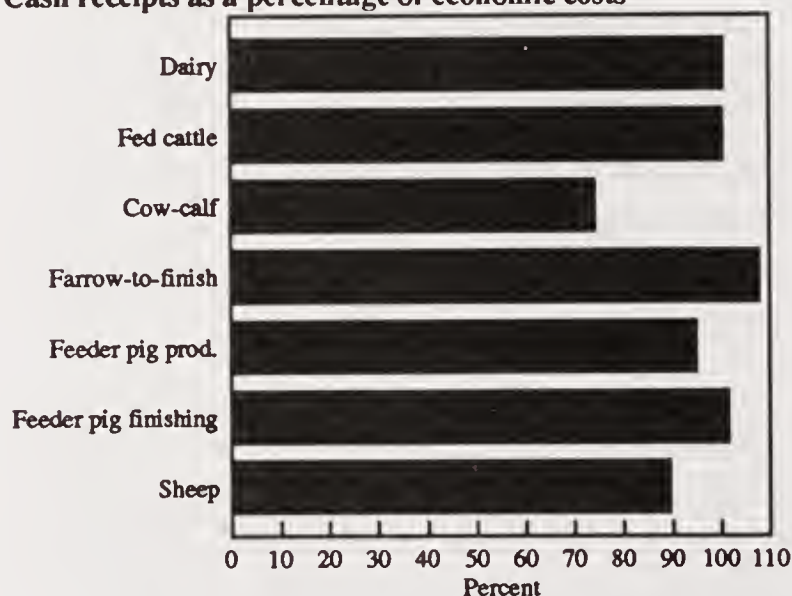
Prices for major production inputs other than feed and forages increased in 1990, with fuels and energy, feeder livestock, and tractors showing the largest increases. Price indexes for selected production items changed as follows:

Input	1988	1989	1990
	Percent		
Farm origin:			
Feed	24.6	3.7	-5.9
Hay	31.1	.2	-2.6
Feeder livestock	7.3	1.0	9.8
Nonfarm origin:			
Wage rates	6.6	4.5	3.2
Buildings	.7	2.2	2.1
Autos and trucks	3.4	3.7	3.6
Tractors	4.0	6.6	4.7
Other machinery	6.5	5.6	3.8
Farm supplies	0	3.4	2.7
Fuels and energy	2.4	9.4	13.3
Farm chemicals	6.6	4.5	3.2

Source: NASS, Agricultural Prices.

Residual returns to livestock enterprises improved most dramatically for farrow-to-finish hog production. Farrow-to-finish and feeder pig finishing showed the highest positive returns, followed by dairy and fed cattle enterprises (fig. 1). Residual returns to cow/calf production improved but

Figure 1  
Returns to livestock enterprises, 1990;  
Cash receipts as a percentage of economic costs



remained negative at -\$138 per cow. The negative residual returns to sheep enterprises became even more negative in 1990 for the second time, and second successive year, since 1984.

**Dairy Costs and Returns**--This issue debuts 1989 and 1990 dairy cost and returns estimates based on the 1989 survey. U.S. costs continued to rise in 1990 with total cash expenses 10 cents higher per hundredweight (cwt) of milk, and economic costs 31 cents higher per cwt. Increased feeding of concentrates accounted for much of the increase.

Cash receipts increased 2 percent (27 cents per cwt) because of higher milk and dairy cattle prices. Both net cash returns and residual returns to management and risk increased. Cash receipts increased more than costs increased, improving residual returns to management and risk. The residual returns picture improved by \$30 in net cash returns and by \$8 for residual returns to management and risk.

Appalachia showed the greatest increase in cash receipts, 89 cents per cwt of milk, a rise of 8.5 percent, followed by the Southeast (82 cents) and Northeast (60 cents). Per-cwt cash receipts declined in the Southeast (7 cents) and Pacific region (26 cents) (fig. 2).

Feed costs rose in all regions except the Corn Belt and the Upper Midwest where much of the feed is homegrown. Total feed costs in the Southern Plains increased 5.4 percent and 41 cents per cwt of milk because of the regionally greater reliance on purchased feed. The Southern Plains saw the largest increase in concentrate costs, 53 cents per cwt of milk, because the region also relies on purchased concentrates.

Lower 1990 hay and other forage prices helped offset higher concentrate prices in all regions except the Southeast. Expenses for hay and silages declined significantly in the Corn Belt and Upper Midwest, the only regions where total feed costs decreased.

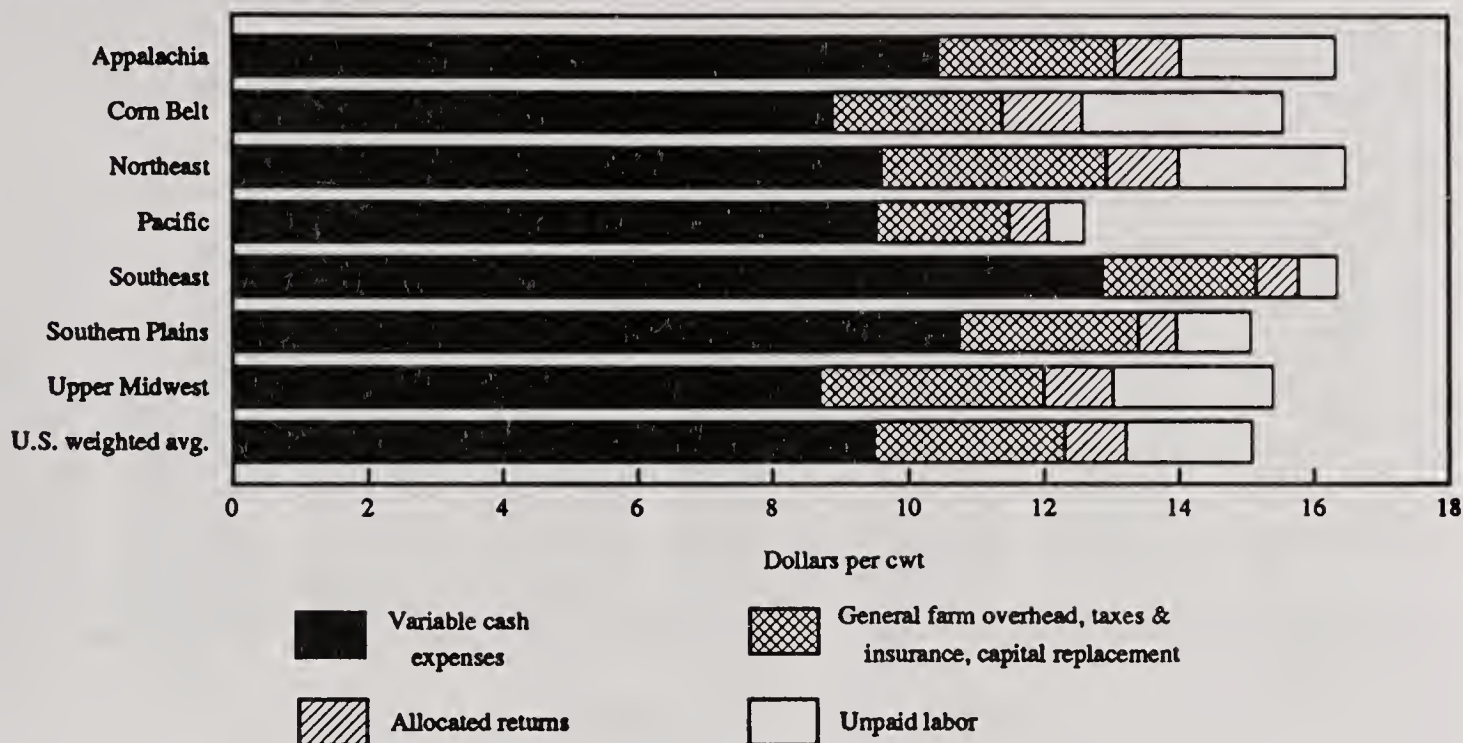
Changes in total cash expenses plus capital replacement ranged from -1.1 percent (Corn Belt) to 2.4 percent (Northeast). Total cash expenses plus capital replacement in the Pacific increased 2 cents per cwt. The combination of a larger increase in cash receipts and smaller increase in total cash costs and capital replacement in Appalachia resulted in the largest increase in 1990 net cash returns (61 cents per cwt above 1989). The Southeast showed the second largest increase in net cash returns (58 cents per cwt). The remaining regions, except the Pacific (down 28 cents per cwt), registered increases in net cash returns of 7-21 cents per cwt.

Total economic costs of producing milk increased in all regions during 1989-90. The Pacific had the lowest economic costs due to lower general farm overhead and



Figure 2

## Total costs of milk production, by region, 1990



lower costs for unpaid labor. Higher fixed and capital costs in the Upper Midwest, the Northeast, the Corn Belt, and Appalachia reflected spending on forage production machinery, used in homegrown forage production, versus regions that purchased much larger portions of feed requirements. Substantial animal-investment housing because of harsher weather added to the fixed costs of regions outside the Pacific, the Southeast, and the Southern Plains.

Costs for unpaid labor were high in the Corn Belt, the Northeast, the Upper Midwest, and the Appalachian regions, which have relatively small herds and rely less on hired labor. Costs for use of family labor by far were lowest in the Pacific, the Southern Plains, and the Southeast regions where herds are larger and require more hired labor.

Costs for unpaid (operator and family) labor were remarkably higher in the 1989 FCRS dairy survey than in the 1985 survey (fig. 3), but were in closer proximity to the 1980 dairy cost of production survey. Expenses for hired labor were also notably higher in five regions in the 1989 dairy survey than in the 1985 survey. Cash wages paid to dairy operators in the 1985 dairy survey could not be separated from wages paid to other workers. As a result, expenses for hired labor in the 1985 dairy survey partially included a payment to dairy operators. The 1985 dairy survey, we now believe, overestimated expenses for hired labor and underestimated costs for unpaid labor. After careful evaluation and comparisons of expenses for paid and unpaid labor of the 1979, 1985, and 1989 dairy surveys, ERS decided that data should be revised for 1985-88 based

on the 1989 survey and changes in annual average wage rates.

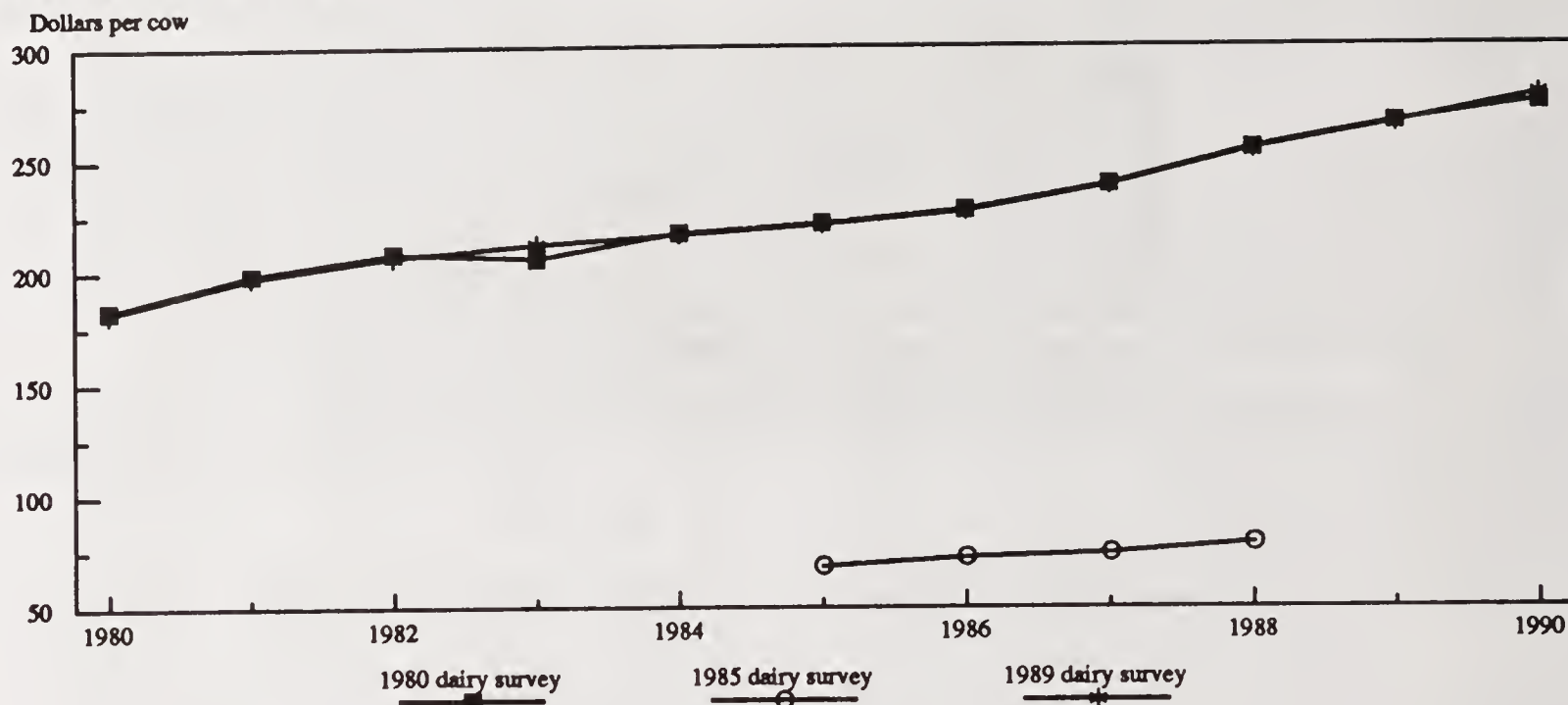
**Fed Cattle**--Fed cattle production costs rose slightly in both 1989 and 1990 (fig. 4). Variable cash expenses increased \$2.65 per cwt to \$74.09 in 1990. Net cash returns to fed cattle operators, still negative, were lower in 1990 than in either 1988 or 1989. Higher prices for slaughter steers and heifers pushed cash receipts to successive record highs of \$73.76 and \$78.77 per cwt in 1989 and 1990, not enough in either year to cover total cash expenses. Feeder cattle and feed expenses were 91 percent of total cash receipts in 1989 and 89 percent in 1990. Overall, total cash expenses and capital replacement exceeded total cash receipts by \$4.48 and \$2.10 per cwt in 1989 and 1990.

Lower forage expenses, combined with lower costs for grain, protein supplements, and hay, yielded lower feed expenses per cwt of slaughter animal in 1990 than 1989 for farmer feedlots. Feed expenses continued to be higher for farmer feedlots fattening calves instead of yearlings than for commercial feedlots which fatten yearlings. As a result of fattening calves versus yearlings, farmer feedlots used more feed and kept feeder cattle longer to reach slaughter weights. Net cash returns to farmer feedlots improved by more than \$3 in 1990.

Commercial feedlots, where feeder cattle constitute a larger proportion of the weight sold, buy older, larger cattle. But shorter feeding periods allowed them to pay less for feed and other inputs. The impact of the drought and lower stocks of feed grains did not carry into 1990, so feed costs



Figure 3  
Unpaid labor expenses per cow



were lower. Residual returns to risk and management increased in 1990, but cash receipts failed to cover cash expenses and capital replacement by 16 cents per cwt.

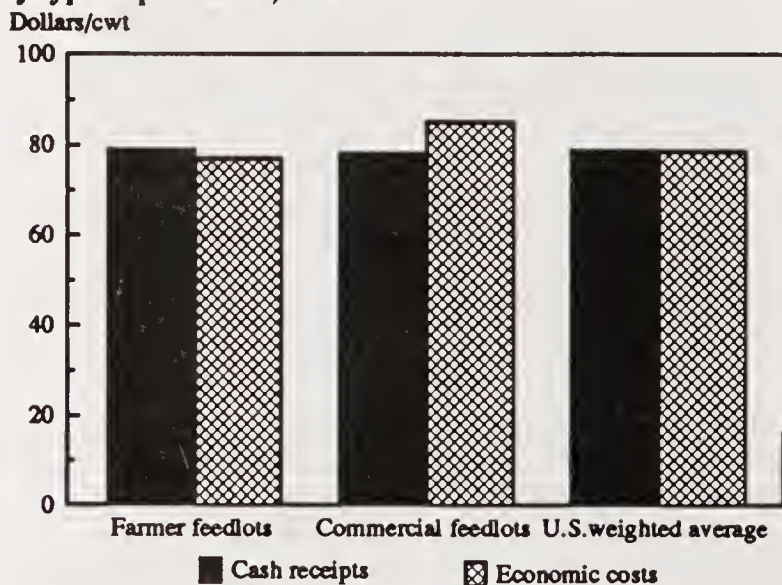
**Cow-Calf**--Net cash returns to cow-calf operators, positive for only the fifth time in 19 years, improved again in 1990 after improving slightly in 1989 in spite of higher fuel and energy expenses. Higher prices for yearlings and feeder calves increased cash receipts to a record 19-year high (fig. 5).

On average, feed costs per cow, of which 75 percent was forage cost, declined. Greater dependence on pasture kept feed costs low for large operations. Medium and large operations (100 head and over) had lower fixed expenses and lower capital replacement costs per cow than smaller operations (fewer than 100 head). Net cash returns to cow-calf production increased as the size of operation increased.

Smaller operations' cash receipts could cover only cash expenses, while, for larger operations, cash receipts covered both cash expenses and capital replacement (fig. 5).

Production costs varied from region to region, but the Great Plains and the West, with 58 percent of the 1990 beef-cow herd, maintained a cost advantage over other regions. Relative returns among regions were influenced by such factors as size, fixed and capital replacement expenses, and feed-pasture tradeoffs.

Figure 4  
Fed cattle production costs and returns,  
by type of producers, 1990

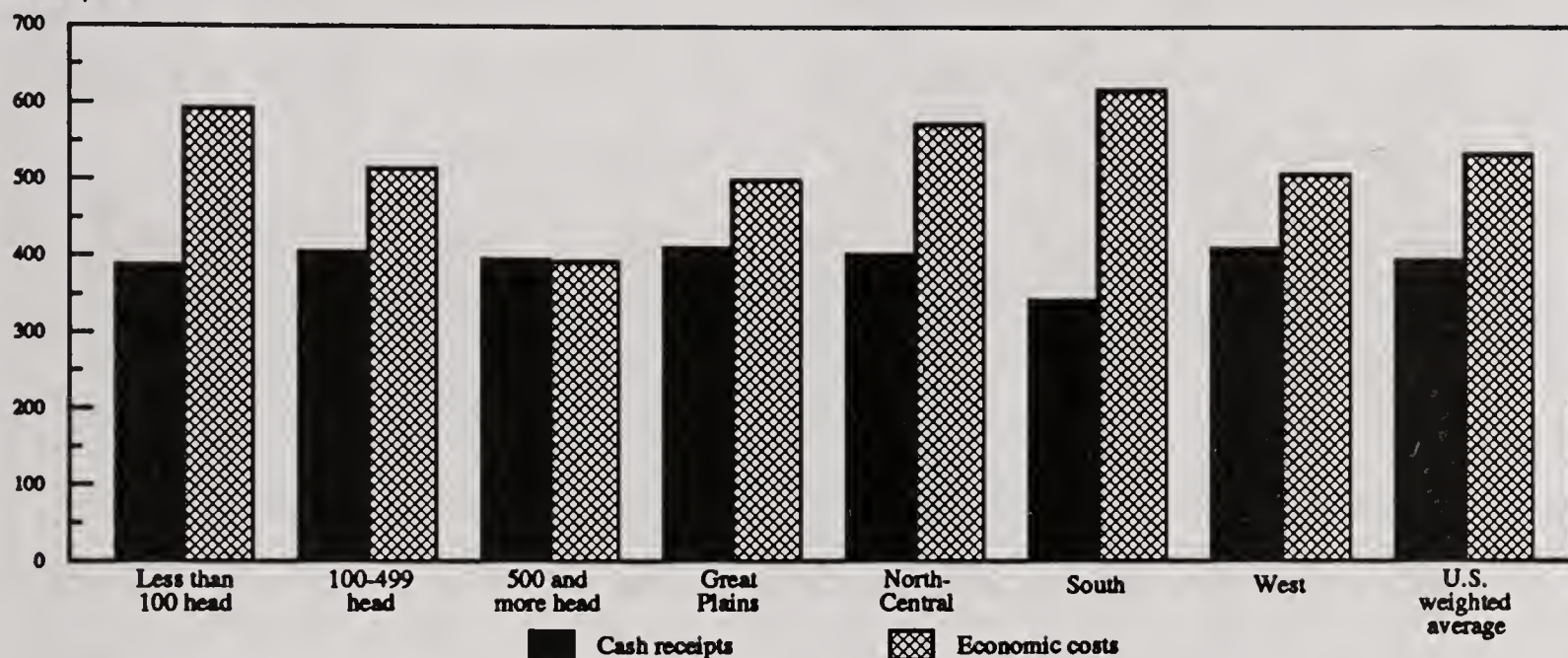


**Farrow-to-Finish Hogs**--Cash receipts increased sharply due to the increase in slaughter hog prices. Total cash expenses and total economic costs per cwt dropped slightly, primarily because reduced feed expenses more than offset increases in other input costs. The Southeast continued to have the highest feed costs. Operations with fewer than 300 head had negative residual returns to management and risk, while those with at least 650 animals had positive residual returns to management and risk (fig. 6).

**Feeder Pig Production**--Cash receipts declined \$3.23 per cwt in 1989, then jumped 51 percent in 1990 due to changes in feeder pig prices so that all operations were able to cover total cash expenses. Total cash expenses fell 2 percent per

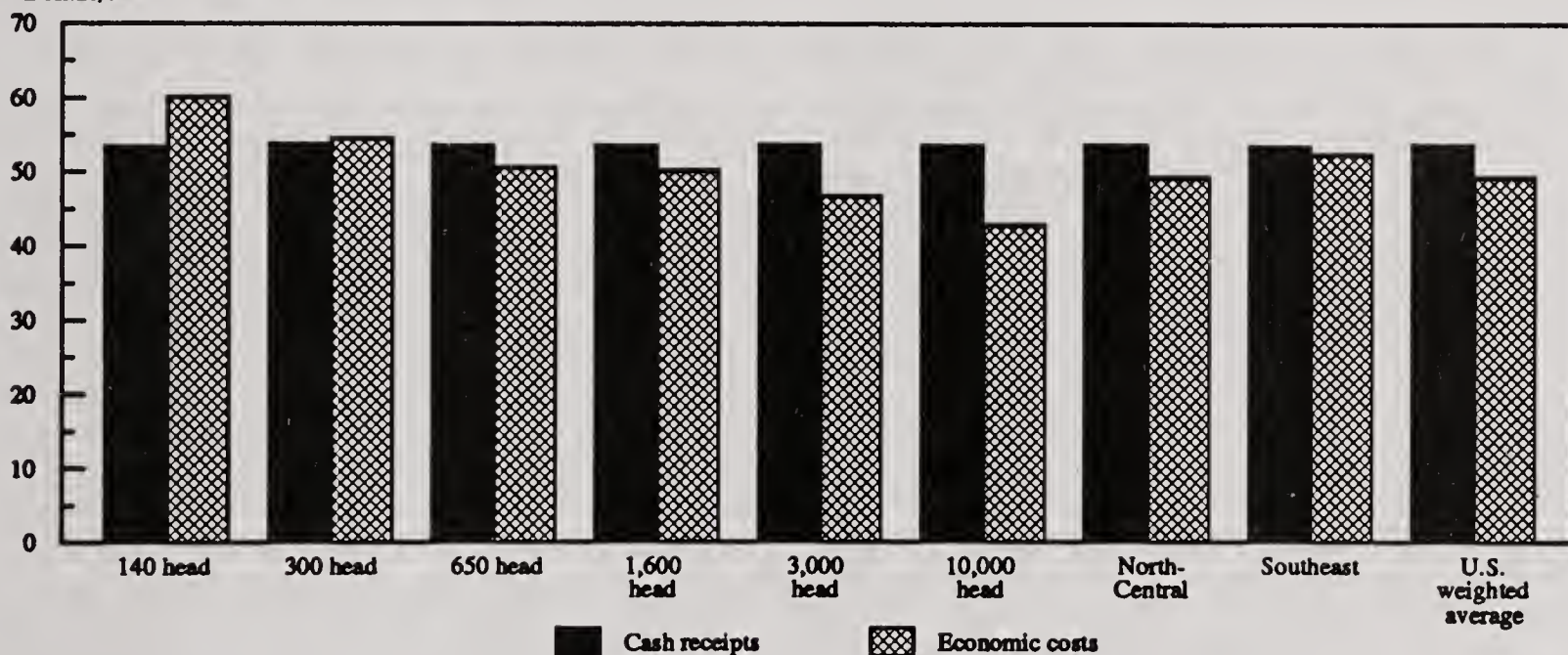
**Figure 5**  
**Cow/calf production costs and returns, by**  
**size of operation and region, 1990**

Dollars/cow



**Figure 6**  
**Farrow-to-finish costs and returns, by**  
**size of operation and region, 1990**

Dollars/cwt



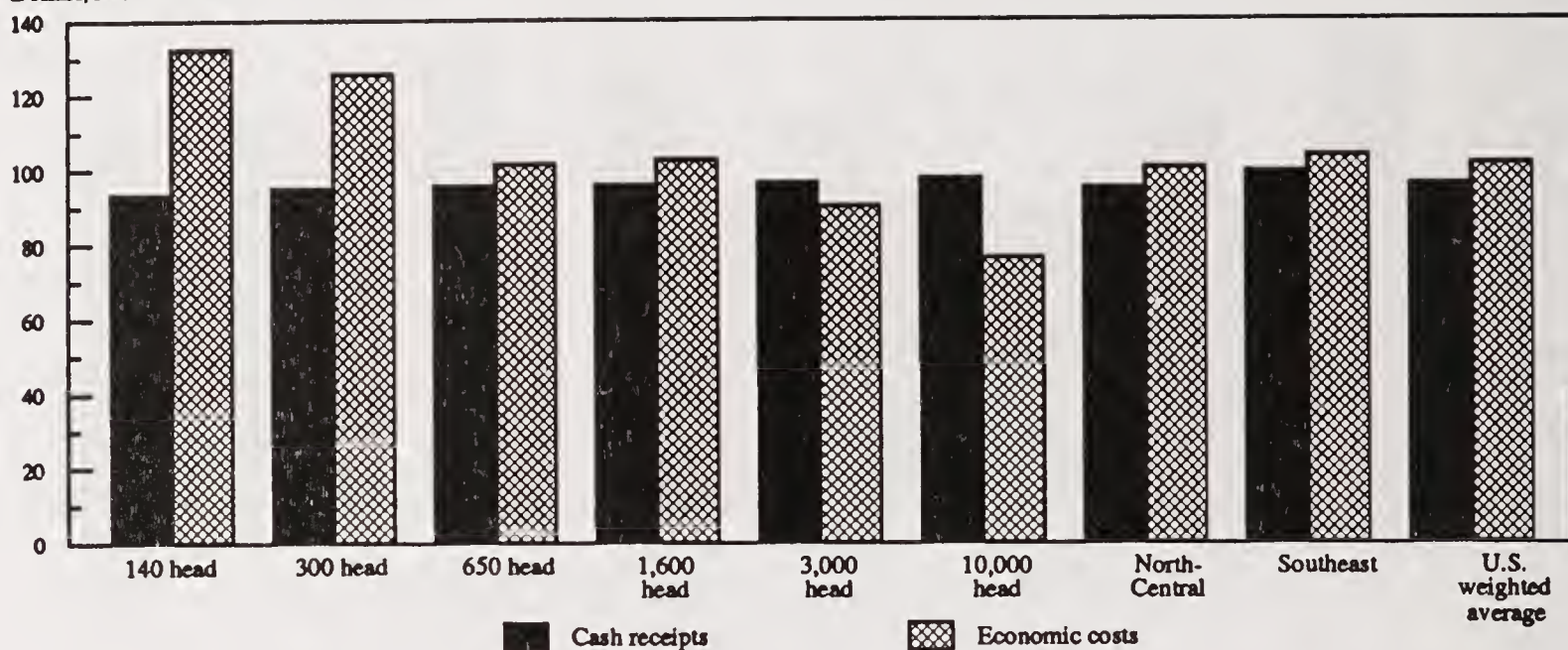
cwt because declines in feed expenses, especially protein supplements, were large enough to offset higher prices for other inputs. Net cash returns per cwt were positive in 1990, following the drop to a record 19-year low in 1989. Cash receipts less total cash costs were positive for operations with 650 head or more (fig. 7), and residual returns to management and risk were positive for operations with 3,000 or more head.

**Feeder Pig Finishing**--Cash receipts increased by almost 24 percent. Total costs were also higher in 1990 because higher feeder pig prices more than offset lower feed costs. Net cash returns were improved but remained negative. Operations with 650 head and more and operations in the North-Central region showed positive residual returns to management and risk (fig. 8).



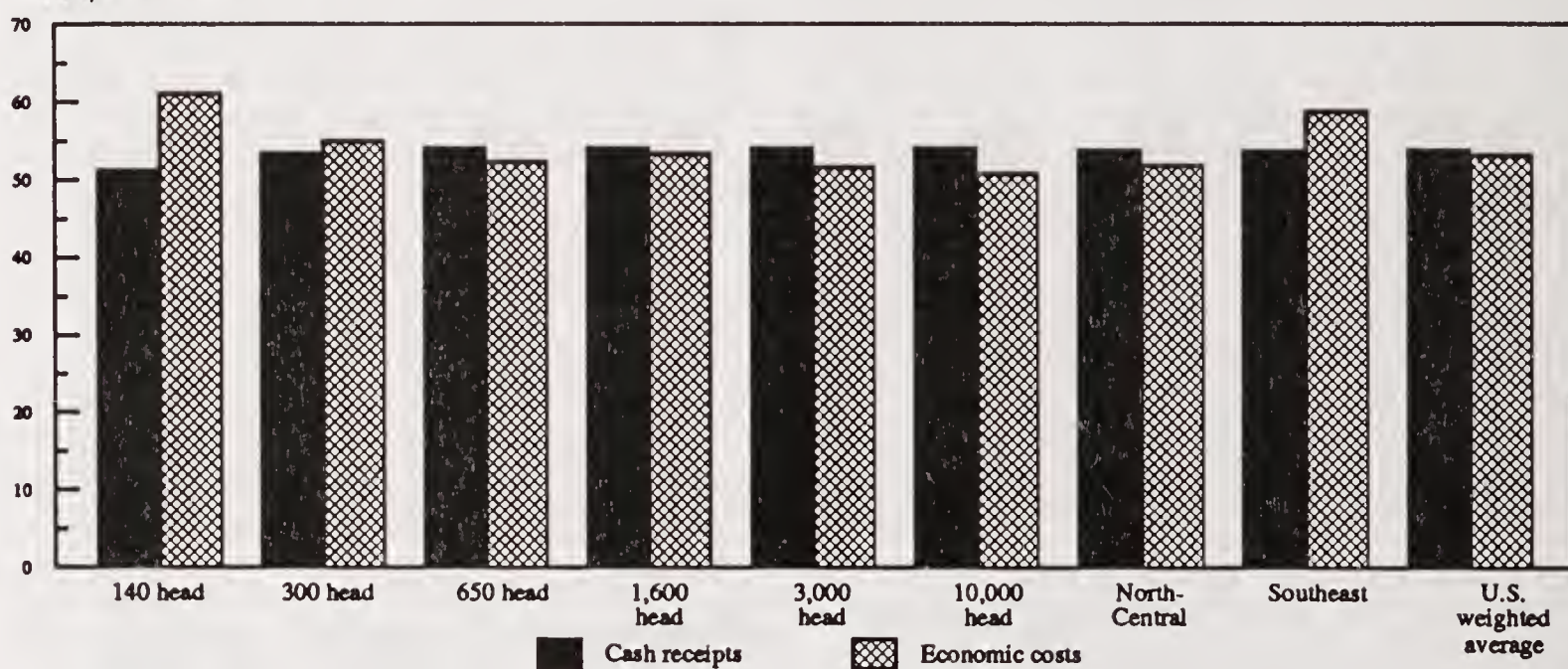
**Figure 7**  
**Feeder pig production costs and returns, by**  
**size of operation and region, 1990**

Dollars/cwt



**Figure 8**  
**Feeder pig finishing costs and returns, by**  
**size of operation and region, 1990**

Dollars/cwt



**Sheep**--Because of lower lamb and wool prices, cash receipts for sheep declined in 1990 even though wool incentive payments and unshorn lamb payments increased. Although the lower cash receipts covered total cash expenses and capital replacement, higher variable costs added to higher fixed expenses resulted in negative residual returns to management and risk for the second time during 1972-90.

Net cash receipts for sheep producers declined from a peak of \$25.12 per ewe in 1987 to -\$9.25. Residual returns to risk and management declined for the second year in a row to -\$7.53 per ewe.



## **Data Sources**

ERS relies on periodic producer surveys to obtain technical data from which the enterprise budgets for specific commodities are constructed.

### **Primary Data**

ERS relies on periodic producer surveys to obtain technical and financial data from which enterprise budgets for specific commodities are constructed. The Farm Costs and Returns Survey (FCRS), begun in 1984, and conducted jointly by ERS and the National Agricultural Statistics Service (NASS), consists of personal interviews of farm and ranch operators who furnish information on income, expenses, and production practices. Items covered include herd size, expenses for selected livestock inputs, types and quantities of feed, housing, equipment for handling feed and manure, and storage structures for feed and manure. The expense of data collection prohibits every type of livestock enterprise from being surveyed every year. Each enterprise is generally surveyed on an approximately 4-year rotating basis.

Prior to 1984, the primary survey for costs of production was the Costs of Production Survey (COPS), also conducted by USDA. COPS samples were drawn from nonrandom lists of producers who had responded to other acreage and production surveys. The COPS sampling was probability-based, where the probability depended on size of operation.

The FCRS is also probability-based, but is a multiframe stratified survey composed of list and area frames. The list frame is made up of farms known to have previously produced a commodity, stratified by size of enterprise. In the year that a particular livestock enterprise is surveyed for production practices, the entire COP sample for that enterprise is in a list frame from which the sample is randomly drawn. Each observation represents a number of similar farms, the particular number being the survey expansion factor, which is the inverse of the probability of the observation being selected in its sample stratum. The FCRS is conducted during February and March, and the data provided pertains to production in the previous year.

Between survey years, the specific enterprise budgets are updated using secondary price and quantity data, mostly published by NASS. The dairy budgets from 1972-84 are based on technical data from the 1979 dairy COPS, while the dairy 1985-88 budgets are based on technical data from the 1985 FCRS, and revised 1989 and preliminary 1990 budgets are based on the 1989 FCRS. The cattle, hogs, and sheep enterprise budgets for 1973-80 are based on 1976 COPS technical data, and the budgets for 1981-90 are based on the 1980 COPS. As new surveys are conducted, new FCRS data for costs of production will be incorporated into future estimates. The different sampling schemes and

methodology between the COPS and the FCRS affected the data underlying production budgets, thus affecting cost estimates.

### **Secondary Data**

Price and quantity data available from other surveys conducted by AMS, ERS, and NASS supplement the FCRS-based technical data. These additional livestock data on price, milk price, milk yield, milk cow and livestock numbers, land values, wage rates, price and quantity data for dairy and livestock feeds, and prices paid for other agricultural inputs are used to generate survey base-year budgets and to update the costs-and-returns budgets between survey years.

For all livestock enterprises except dairy in 1989 and 1990, engineering relationships, developed by the American Society of Agricultural Engineers (ASAE), are programmed in a computerized budget generator that estimates machinery costs on a per-hour basis. The budget generator also provides estimates of expenses for fuel, lubrication, electricity, repairs, taxes, insurance, and machinery replacement costs according to the number, type, and hours of use summarized from survey data.

## **Enterprise Budgets**

ERS presents COP data in the form of an enterprise budget which summarizes all costs and returns associated with the production of livestock or milk. The budgets identify costs associated with the specific enterprise and exclude costs and returns generated by all other enterprises on the farm. For example, many operations grow feed for their livestock. The budgets reflect costs associated with producing the feed that is actually fed to the specific livestock enterprise, but excludes both the costs and returns from feed grown on the operation that is fed to other enterprises or is sold.

Each enterprise budget contains cost and returns measures separated into three major categories: cash receipts or gross value of production, cash expenses, and economic costs. The budgets are estimated on a per-head basis (per cow, per ewe) and/or on a per-cwt basis (per cwt of milk, hog, or fed cattle). Regional and national budgets are weighted averages of data within each State surveyed.

### **Cash Receipts (Gross Value of Production)**

Including the cash receipts helps put costs in perspective. Given levels of costs could be associated with a high or low level of net returns, depending on the value of the livestock product(s). Reporting only costs or only the cash receipts gives just half the picture. Cash receipts for a calendar year are included whether or not cash payment was actually received in the same calendar year the livestock product was produced.



The term "gross value of production" was used in 1987 and 1988 for consistency with the crop cost of production budget format (where "cash receipts" is inaccurate). Since crops and livestock COP estimates are now published separately, the livestock estimates have returned to "cash receipts" terminology. The value of both the primary and the secondary or joint livestock products, that is, cull and surplus stock and/or wool, are included. Although these secondary products are easily identified, their production costs are not easily distinguished. For example, it can be difficult to determine whether certain inputs, such as feed or housing, are for the production of the primary or secondary product. So, a budget for the complete livestock enterprise is estimated rather than trying to separate the production costs for each product.

Except for wool incentive and unshorn lamb payments, direct Government payments are excluded from the cash receipts. However, the effects of Government programs on milk and meat costs and returns are implicitly reflected in market prices. The Government supports the milk price through direct market intervention by Commodity Credit Corporation (CCC) purchases of manufactured dairy products (butter, cheese, nonfat dry milk). The Government also affects prices for milk and meat by limiting the quantity of milk (mostly in manufactured product forms) and meat imports. The Government also assists agricultural producers in emergencies caused by natural disasters. For example, one provision of the Emergency Feed Assistance Program (EFAP) provides direct payments for producers facing abnormally high feed expenses. However, because of the lack of data linking these payments to specific enterprises, they are not included in the cash receipts.

Cash receipts are based on product prices and yields. Gains and losses accruing from changes in asset values are not included except for residual returns to nonland capital and land. Livestock prices are the prices received in the month that the livestock is typically sold (or purchased) for the particular type (cows, steers and heifers, calves, barrows and gilts, sows, lambs, sheep, or wool) reported by NASS in *Agricultural Prices*. The prices of the byproducts of milk production, cull dairy cows, calves, and replacements (cattle), reflect the marketing year average price. The milk price is the average annual price received for milk sold to plants and dealers by producers as reported by NASS in *Agricultural Prices*. Quantities of livestock sold are summarized from the FCRS for the survey year (month sold/purchased for beef, hog, and sheep enterprises) and remain constant over nonsurvey years. FCRS data also furnish milk sold per cow. The quantity of milk sold is updated between survey years by indexing the changes in average milk produced per cow reported by NASS in *Milk Production*.

## Cash Accounts

The cash accounting portion of the budgets reflect the cash transactions relevant to the enterprise. The two categories of cash expenses per unit of livestock product, variable and fixed, reflect costs that must be covered if the operation is to continue to operate in the short run, that is the break-even point. Income taxes and loan principal payments are not included in the enterprise budgets. Although producers have some discretion as to when to actually make capital purchases, capital replacement reflects actual "costs" where producers must set aside funds to replace equipment, machinery, livestock, and buildings.

### *Variable Cash Expenses*

Variable cash expenses are those that vary with the quantity of production of a given product. For most livestock enterprises, the largest single component of variable expenses is feed. The FCRS reports the amounts and types of feed fed to both breeding and replacement stock and how much was grown by the producer for the livestock enterprise. The feeds are itemized and listed at the head of the variable cash expenses under the subheading "Feed." Feed costs reflect the full cost of purchased forage and the variable costs of forage production. The other nonvariable costs (such as taxes and insurance, interest, capital replacement charges, and land) for the crop machinery and cropland associated with homegrown livestock forage production are included in specific line items. The homegrown forage costs are estimated annually from separate unpublished forage production budgets. The purchased forage prices reported in the FCRS are updated between survey years by indexing according to changes in hay prices reported by NASS in *Agricultural Prices*.

Most livestock feed costs are based on the market price for grains, concentrates, and feed supplements. These market prices are adjusted between survey years by indexing according to changes in the prices paid index for the respective commodity as reported by NASS in *Agricultural Prices*. The quantities of grains and supplements are obtained from the FCRS and are not adjusted between survey years.

Dairy differs slightly from other livestock budgets. Dairy concentrate expenses include all purchased and homegrown grains, nutritional supplements, and premixed feed. Purchased concentrates are valued at the market prices, reported by producers in the FCRS. The price and quantity of concentrates fed is updated between surveys by indexing according to the change in the quantity fed per cwt of milk and the value of grains and concentrates fed to milk cows, respectively, as reported by NASS in *Milk Production*. The level of feeding also is adjusted by year-to-year changes in output per cow between surveys as reported by NASS.

Illustration 1--Differences in procedures between surveys for milk production costs and returns estimates

1985 dairy survey (1985-88)	1989 dairy survey (1989-90)
<u>Cash expenses</u>	
Feed costs:	Feed costs:
Purchased grains, forages, & byproducts-- Quantity fed times market prices or average cost	Purchased grains, forages, & byproducts-- Dairy share of total farm feed expenditures during 1989
Homegrown grains, forages, & byproducts-- Quantity of grains fed times market prices Quantity of forages fed times variable cost of forage production Byproducts fed times market prices	Homegrown grains, forages, & byproducts-- Quantity of grains fed times market prices Quantity of forages fed times variable cost of forage production Byproducts fed times market prices
Fuel, lube, and electricity: Budget generator	Fuel, lube, and electricity: Dairy share of total farm fuel, lube, and electricity expenditures during 1989
Machinery and building repairs: Budget generator	Machinery and building repairs: Dairy share of total machinery and building repairs expenditures during 1989
Paid labor: Includes expenses for contract labor and cash wages, cash and noncash expenses paid other operator family members, and partial payment to operator	Paid labor: Includes expenses for contract labor and cash wages, cash and noncash expenses paid other operator family members
Taxes and insurance: Budget generator	Taxes and insurance: Dairy share of total farm real estate and property taxes and crop insurance expenses during 1989
Capital replacement: Budget generator	Capital replacement: Capital invested in dairy breeding herd, plus dairy share of farm actual expenses for building and machinery

Economic (full ownership) costs

Return to nonland capital: Budget generator	Return to nonland capital: Value of dairy livestock plus dairy capital replacement times the average age of each asset type multiplied by the calculated 10-year rate of return of agricultural assets
Unpaid labor: Imputed expenses for unpaid operator and other unpaid workers' time spent on dairy enterprise valued at the annual average hourly wage rates for all hired farmworkers	Unpaid labor: Imputed expenses for operator and other unpaid workers' time spent on dairy enterprise valued at the annual average hourly wage rates for all hired farmworkers



Some producers who are surveyed may have been eligible for the Federal Government's drought relief programs. EFAP provided for low-cost grains. However, due to the uneven geographic distribution of program benefits, data were inadequate to reflect the impact of the EFAP assistance on the various enterprise budgets.

The expenses for several other inputs are obtained from FCRS data and are updated between survey years by composite changes in more than one set of NASS prices. Artificial insemination expenses and Dairy Herd Improvement Association (DHIA) fees are updated by an index based on 20 percent of the change in the prices paid index for fuels and energy, 30 percent of the change in the prices paid index for autos and trucks, and 50 percent of the change in the wage rate index. A composite index made up of 30 percent of the change in the prices paid index for agricultural chemicals and 70 percent of the change in the wage rate index is used to update veterinary and medicine expenses.

Livestock hauling expenses are updated using an index based on 30 percent of the change in the prices paid index for fuels and energy and 70 percent of the change in the prices paid index for farm and motor supplies. Changes in the costs of dairy supplies are based on changes in the prices paid index for items used for production. The hired labor cost (expenses) is estimated by multiplying the number of hours obtained from the FCRS times the reported farm labor wage rate plus the employer's contribution to Social Security. Hired labor expenses for the dairy enterprise are obtained as total expenses per cow and are indexed between survey years by the change in the farm labor wage rate including Social Security. Marketing expenses include fees paid to brokers, cooperatives, handlers, or dealers to facilitate the exchange of livestock products.

Milk marketing charges per cwt are obtained from the FCRS and are updated by changes in the marketing charges reported by administrators of Federal Milk Marketing Orders. Milk hauling charges are estimated in the same way. Livestock marketing charges are obtained from the FCRS and are updated from the prices paid index for all production items of nonfarm origin. The expense for bedding materials, such as straw, is obtained from the FCRS, and is updated according to the price of other hay as reported by NASS in *Agricultural Prices*.

Credit for the fertilizer value in manure from fed cattle operations and hog operations is included as an expense because it reduces the cost of fertilizer used in producing feed for these enterprises. The value is estimated by taking the amount of nitrogen, phosphorus, and potassium supplied by the manure from the enterprise and multiplying it by the price of the respective ingredients for the survey year. Between survey years, the value of livestock manure is indexed by the prices paid for fertilizer. The custom feed

mixing expenses for cow-calf and feeder pig enterprises are taken from the FCRS and are updated by labor and machinery cost indexes.

Shearing and tagging expenses for sheep enterprises are taken from the FCRS and are updated by changes in the farm wage rate. Ram death loss accounts for the number of rams that need to be replaced to maintain the flock. The quantity, obtained from the FCRS, is valued at the market price for cull ewes as reported by NASS in *Agricultural Prices*.

The procedure for calculating the cost of owning and operating machinery and equipment is complex. Every operation has a different age and size distribution and different numbers and types of machinery and equipment items. Most operations have more than one enterprise. Machinery and equipment costs for an operation are allocated among the specific enterprises on the farm. The numbers, sizes, hours of use, type of fuel used, age, total hours of annual use per enterprise, and types of machinery and equipment used for specific enterprises come from FCRS data. ERS specifies the length of life and obtains estimates of list and purchase prices used to calculate machinery- and equipment-related costs. Prices are updated annually by prices paid indexes for certain farm machinery reported by NASS in *Agricultural Prices*, except for dairy, which is explained later.

The fuel, lube, and electricity expenses for the equipment and machinery specified in the FCRS are calculated by the economic engineering equations developed by the ASAE, except for dairy. Prices for fuels in each State, adjusted for refundable Federal and State excise taxes where necessary, are reported by NASS in *Agricultural Prices*. Machinery and building repairs for equipment, machinery, and buildings specified in the FCRS for each enterprise, except for dairy, are also estimated by economic engineering equations developed by the ASAE.

Expenses for fuel, lube, and electricity, machinery and building repairs, taxes and insurance, and capital replacement for dairy were allocated by a different method. The allocation procedure was based on previously published FEDS estimates of regional 1989 costs for each commodity, crop and livestock, produced in each region. To determine the dairy share of costs for each observation, the regional FEDS-based per-acre or per-head cost item (for example, the per-acre fuel cost for corn in the Southeast) was multiplied by the acres or number of head for each enterprise reported for an operation. Costs for all enterprises were added together until an estimate of the total expenditures for the farm, like total fuel costs, was derived. Then the FEDS-based estimate of the single enterprise total cost for a selected line item (for example, repairs for the dairy livestock enterprise) was divided by the total of all FEDS-



based cost estimates for a line item for all enterprises on the operation.

This procedure yields the FEDS-based proportion of total line item expenditures attributable to the specific livestock enterprise. Finally, this FEDS-based proportion was multiplied by the actual observed FCRS total capital expenditures for an operation, supplying the enterprise share of capital expenditures for a specific operation. Summing the costs for all operations in a region and dividing the total by the appropriate number of animals for the region yielded the budget line item amount.

Since the 1989 FEDS estimates used in calculating enterprise shares are based on the same or similar machinery complements for all commodities, the relationships between commodities are logically consistent and reflect the actual relationship of expenditures between commodities. This FEDS-based allocation procedure furnishes a relatively precise way of allocating total farm expenditures for capital or other cost items, like fuel expenditures or repairs, to a specific enterprise.

**Dairy share of repairs, taxes, and insurance--**The farm share of repairs, taxes, and insurance were all allocated according to the enterprise share of repair costs based on the assumption that repairs, taxes, and insurance are proportional to capital invested in the farm (the same assumption FEDS made). Total repair costs for the operation were allocated to the livestock enterprise according to the enterprise share of FEDS-based repairs:

Repair costs for the dairy enterprise = (the dairy share of FEDS-based repairs) x (the total FCRS repair costs for the operation),

where the dairy share of FEDS-based repair costs = ((the per-cow FEDS-based repair costs) x (the number of milk cows)) / ((the sum of (each crop's per-acre FEDS-based repair costs) x (each crop's acreage)) + (the sum of each livestock unit's per-head FEDS-based repair costs) x (the number of head)).

For example, suppose a hypothetical Corn Belt farm grew 50 acres of corn and had 100 dairy cows in 1989. The repairs per milk cow would be:

Dairy share of 1989 farm repair costs (per cow) =  
(((\$7.13 x 100 cows) / (\$7.13 x 50 acres + \$57.18 x 100 cows)) x \$6,450 / 100 cows = \$60.71,

where,

FEDS-based corn repair costs per acre in 1989 = \$7.13,  
FEDS-based dairy repair costs per cow in 1989 = \$57.18,  
and

Fifty acres of corn were planted in 1989, and there were 100 milk cows.

Total repair costs for the farm in 1989 were \$6,450.

**Dairy share of fuel, lube, and electricity--**Total fuel, lube, and electricity (for irrigation) costs for the operation were also allocated to the livestock enterprise according to the enterprise share of 1989 FEDS-based fuel, lube, and electricity costs for the operation:

Fuel, lube, and irrigation electricity costs for the dairy enterprise = (dairy share of per-cow FEDS-based fuel, lube, and irrigation electricity costs) x (farm's total fuel, lube, and irrigation electricity costs).

### ***Fixed Cash Expenses***

General farm overhead expenses, taxes and insurance, and cash interest paid are relatively fixed in the short run, regardless of the level of production. Overhead expenses represent actual cash expenses for electricity for general farm use, fees and dues, fence materials and supplies, farm telephones, farm water (not irrigation), water drainage, liability insurance, and general business expenses. Actual interest expenses paid reflect both real estate and nonland loans. These expense items come from the FCRS.

Personal property taxes are based on the current value of new machinery, equipment, and buildings lagged to a base year. Land taxes are based on the value of land and the real estate taxes for the particular production area. Lags are based on the average age of equipment, machinery, and buildings from the FCRS data. Insurance expense, however, is based on the current value of these assets. Only taxes on the machinery, equipment, and buildings actually used in the production of the particular enterprise are included. Again, dairy taxes and insurance were determined as a FEDS-based (see dairy repairs) share of total farm expenditures.

The procedures to update general farm overhead and interest expenses for all livestock budgets for 1988, 1989, and 1990 and for 1990 dairy costs and returns data are different from procedures used before. Percentage changes from the base year indexes of prices paid for all production items and interest permit updating the overhead and interest expenses.

### ***Capital Replacement***

An operator may defer machinery and equipment purchases depending on the economic conditions facing the operation in any year. However, timely replacement of capital stock is essential for maintaining production over the long run. ERS estimates the costs of machinery, equipment, and breeding livestock at current prices. Thus, capital replacement represents a charge sufficient to maintain production capacity through time. The value of purchased breeding animals depreciates to salvage value. The number of years over which the animal's value depreciates varies by region and species. Livestock used for replacement but raised on the farm do not depreciate because the cost of raising these



replacements is included. Depreciating such replacement animals would result in a double-counting. The additional capital expenditures for homegrown forages fed on the operation were added to the dairy share. Capital replacement costs for dairy replacement livestock came from dividing the expenditures for purchased dairy breeding livestock by the appropriate number of animals reported for each operation.

The new capital replacement costs for dairy are not much different from 1985-based estimates for 1989. However, interest on nonland capital costs declined for two reasons. First, 1988 cost estimates are based on 1985 data, while 1989 and 1990 estimates are based on more recent 1989 data. Second, the method of calculating asset values is based on actual expenditures and actual average lives as reported in the FCRS, rather than the 4-year lagged average prices for selected assets under FEDS-based estimates.

### **Net Cash Returns**

Net cash returns is a new term used for identifying the residual after subtracting total cash expenses and capital replacement expenses from total cash receipts. It is the cash remaining after production expenses that is available for debt service, family living expenses, income taxes, and to reward the operator's risk, labor, capital, and management. It is not profit, since neither income taxes nor a return to owned capital is taken into account.

### **Economic (Full Ownership) Costs**

Economic costs reflect an assessment of the full resource costs of a livestock enterprise, regardless of who owns the resources. All assets are assumed to be owned. The cash expense section includes actual cash interest paid, which is heavily dependent on the level of debt, the type of debt, and repayments to lending institutions. Therefore, instead of including the actual cash interest expense, the opportunity costs of operating capital, nonland capital, and landownership are imputed, as is the value of unpaid labor. These costs are not market transactions. The economic cost per unit indicates the average break-even price needed to motivate producers to fully cover all factors of production and continue producing in the long run.

The return allocated to operating capital is based on the assumption that the rational producer expects money invested in production inputs to earn at least as much as if the money were earning interest at the 6-month U.S. Treasury bill rate. Treasury bill rates for 1988, 1989, and 1990 were 6.92, 8.04, and 7.47 percent.

The annual expected return the average producer might receive from capital invested in the nonland assets used in livestock production is estimated by multiplying a 10-year moving average of the ratio of residual income to assets for the farming sector by the value of the machinery, equipment,

and breeding livestock. The value of machinery, buildings, and equipment are lagged from current prices according to their average age to reflect their initial prices. The average age for equipment and permanent structures is obtained from the FCRS.

Livestock is valued at the current year's prices. An operator could expect the capital invested in livestock inputs to receive an annual return equal to their opportunity costs, exclusive of asset valuation changes because of inflation or deflation. The rate of return must be calculated from earnings from the current production process. Earnings from price appreciation (capital gains) or price depreciation are not included here or in the cash receipts section. The expected rate of return is calculated by taking the average of the previous 10-year total return to production assets in the agricultural sector, subtracting the value of the operator's labor used each year, and dividing by the respective cash receipts assets. All three series appear in *Economic Indicators of the Farm Sector: National Financial Summary*. The calculated rates for 1988 through 1990 are 2.54, 2.68, and 2.85 percent.

Asset values for dairy operations were calculated by multiplying operator-reported capital replacement by the average age of each asset type, that is buildings and machinery. Dairy livestock was valued at State average prices for dairy replacements. Both the average expenditures for new capital and the average age of each asset type were estimated directly from the 1989 dairy FCRS data. This assumes that an imaginary operator entering the dairy industry in 1989 would pay the calculated asset values per cow.

The allocated returns to land is the value of land used for the livestock enterprise (including land for livestock feed production) multiplied by the calculated 10-year rate of return to agricultural assets.

The annual hours of unpaid labor (operator, family, and other) were reported in the FCRS and are valued at the annual average hourly wage rate for "all hired farmworkers" plus the employer's share of social security taxes. Any additional return reflecting the operator's labor skills or entrepreneurial capabilities appears in the residual return to management and risk.

Total economic costs consist of variable cash expenses, general farm overhead, taxes and insurance, capital replacement, and allocated returns to operating capital, nonland capital, land, and unpaid labor. The residual (total economic costs subtracted from cash receipts) is the return to the producer's management and risk. The returns to management and risk should be evaluated in light of the given allocation of returns to owned inputs and are directly comparable across livestock enterprises since the same procedures are used. In the long run, the return to risk is



expected to average near zero, although in any year, it could be positive or negative depending on weather and supply and demand factors. Returns to management are not typically determined by a set rate, so the actual level is quite obscure, but it should be greater than zero. Therefore, the average residual returns to both management and risk on the average are expected to be positive.

## Appendix--Time Series Data

This report presents a set of costs and returns estimates for U.S. livestock and dairy production for 1972-90. Tables 56-62 show the costs of producing livestock for 1972-87 and for dairy for 1972-88. The report's one set of time series data reflects changes in the cost structure of the livestock and dairy industry over time. Total economic costs for cattle, hogs, sheep, and milk production ranged from 80 to 156 percent higher in 1990 than in 1972 (figs. 9-15). Milk production is the only enterprise for which cash receipts were more than 100 percent of total economic costs for 18 times between 1972-90. Cow-calf cash receipts averaged the lowest percentage of economic costs, 61 percent, of all livestock enterprises. Sheep production showed the largest variation in this measure, ranging from 74 percent in 1974 to 124 percent in 1987.

**Milk**--Cash receipts as a percentage of total economic costs for the 19-year period ranged from 94 to 122 percent and averaged 113 percent. Feed costs averaged 53 percent of total cash costs and 41 percent of total economic costs during 1972-90.

**Fed cattle**--Net cash returns were the highest in 1978, \$3.65 per cwt, and the lowest in 1981, -\$9.04. Net cash returns averaged -\$4.03.

**Cow-calf**--Net cash returns averaged -\$28.04 per cow during 1972-90. Cash receipts averaged 61 percent of total

economic costs, peaking at 86 percent in 1979. On average, the residual return to management and risk of cow-calf operations was -\$158.42. In contrast to dairy enterprises, cash receipts for cow-calf producers were less than 100 percent of total economic costs for all of 1972-90.

**Farrow-to-finish hogs**--Residual returns to management and risk of farrow-to-finish operations averaged -92 cents per cwt, the highest of all hog enterprises. Cash receipts averaged 98 percent of total economic costs, peaking in 1987 at 119 percent, and in both cases, the highest of the three types of hog enterprises.

**Feeder pig production**--Net cash returns were positive 10 times between 1972 and 1990, but cash receipts as a percentage of total economic costs were at their lowest level in feeder pig production enterprises and reached record lows in 1980 and 1989 when they averaged -\$1.59 per cwt. Among all hog enterprises during the 1980's, cash receipts as a percentage of total economic costs were record or near-record lows in 1980 and 1989. Residual returns to management and risk averaged -\$14.31 per cwt.

**Feeder pig finishing**--Net cash returns were negative for 18 of the years during 1972-90, being positive only in 1987. Feeder pig finishing fared slightly worse than feeder pig production. Net cash returns averaged \$3.49 per cwt below feeder pig production returns. However, the residual returns to management and risk were \$10.24 per cwt, more favorable for feeder pig finishing operations than feeder pig production operations.

**Sheep**--Net cash returns to sheep production peaked in 1987 and were the lowest in 1974, averaging \$9.96 per ewe over the 19-year period. Cash receipts also peaked in 1987 but were the lowest in 1972. Total cash receipts averaged 93 percent of total economic costs, and the highest ratio, 124 percent, was the highest of all enterprises.



Figure 9  
Costs and returns of milk production, 1972-90

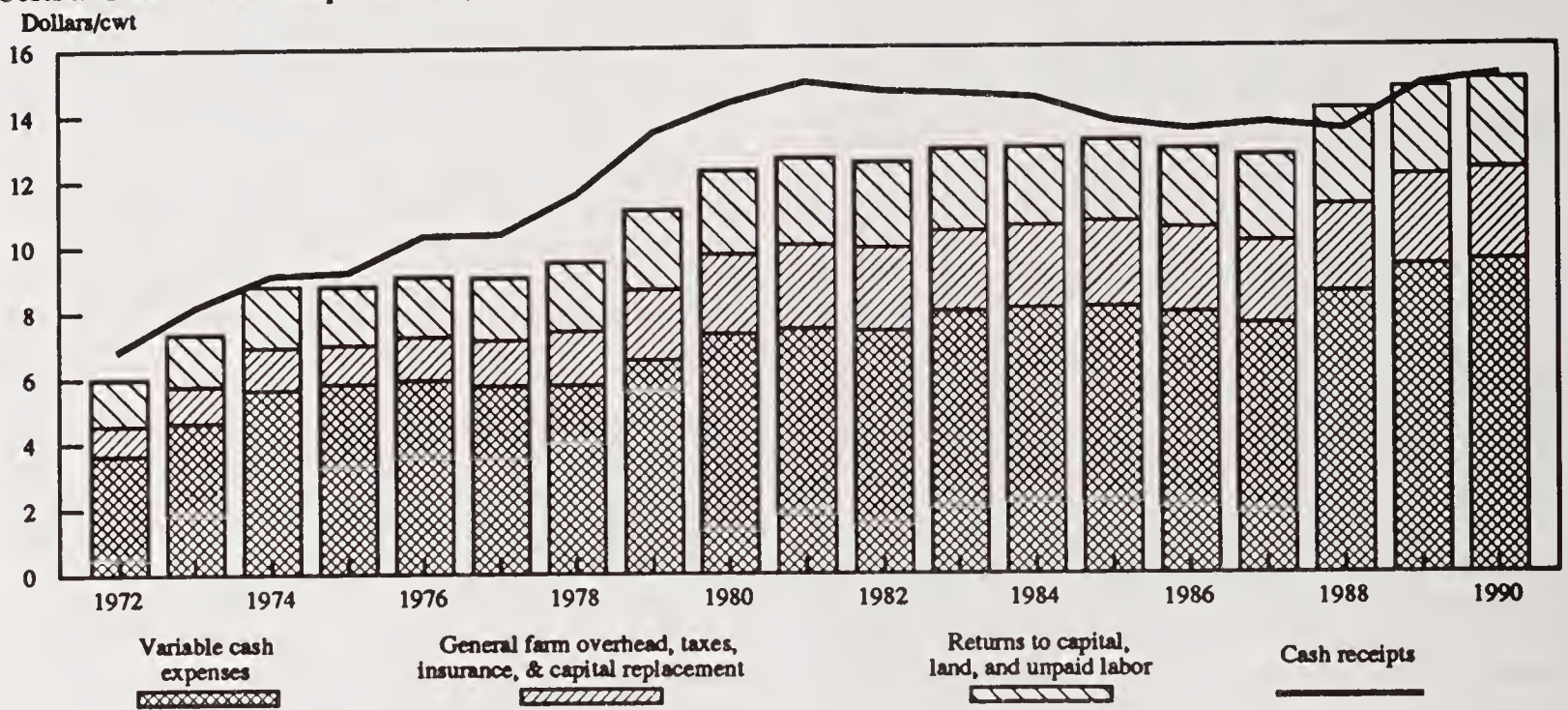
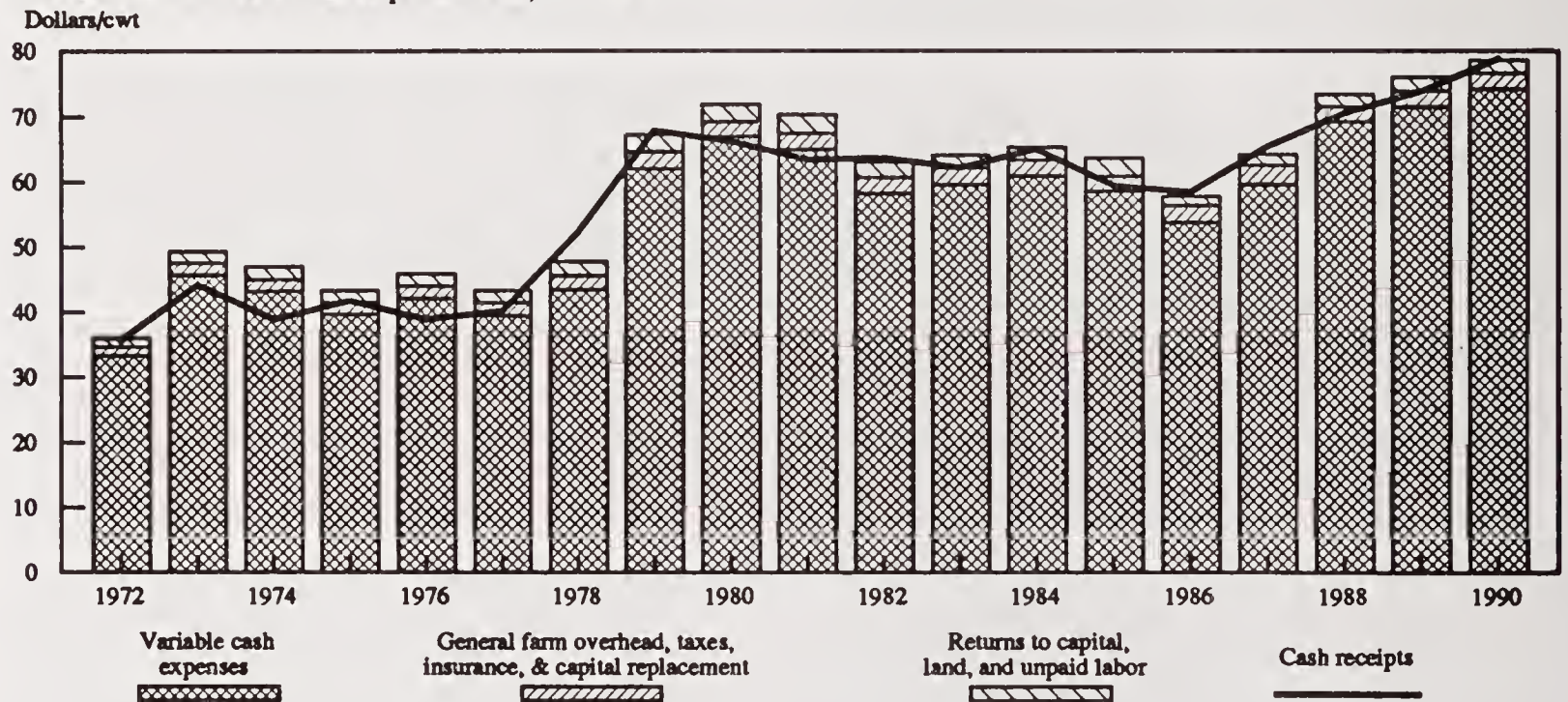


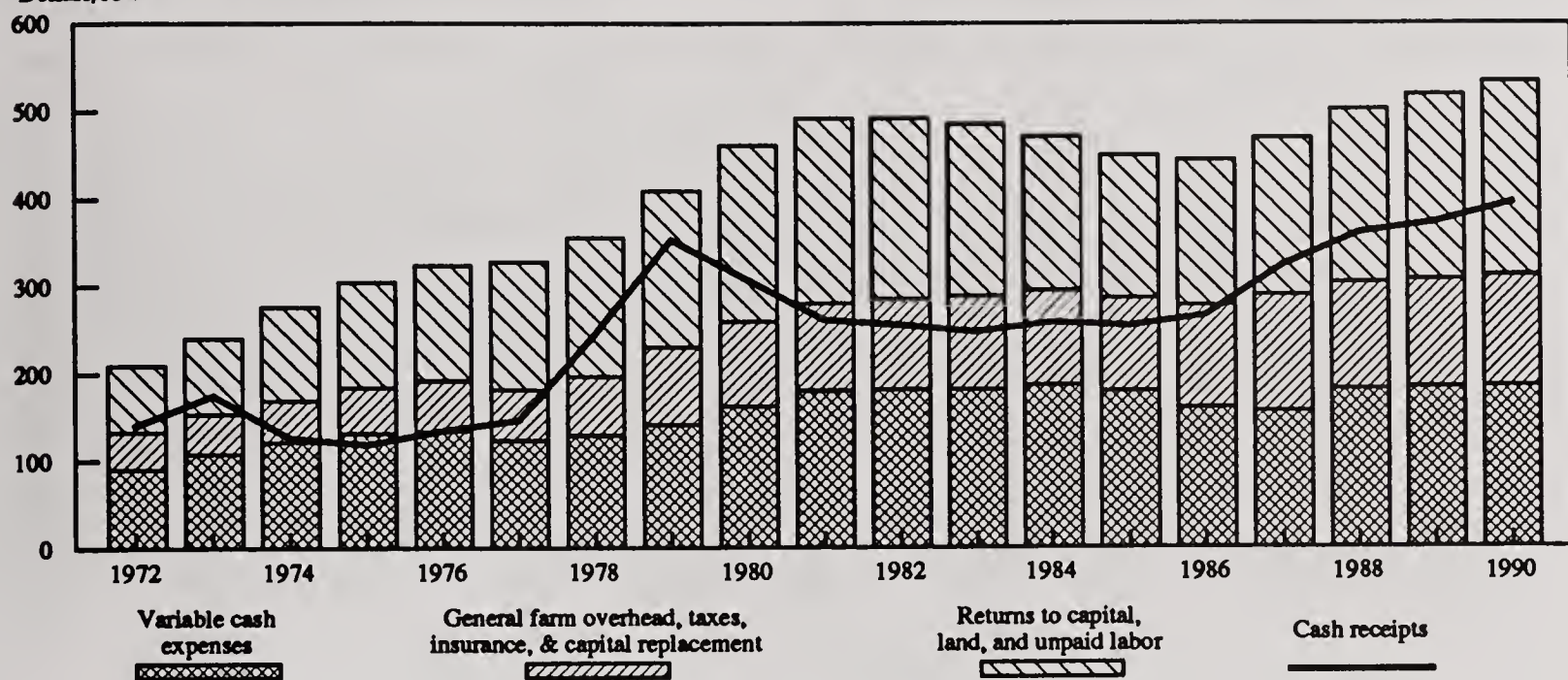
Figure 10  
Costs and returns of fed cattle production, 1972-90





**Figure 11**  
**Costs and returns of cow-calf production, 1972-90**

Dollars/cow



**Figure 12**  
**Costs and returns of farrow-to-finish hog production, 1972-90**

Dollars/cwt

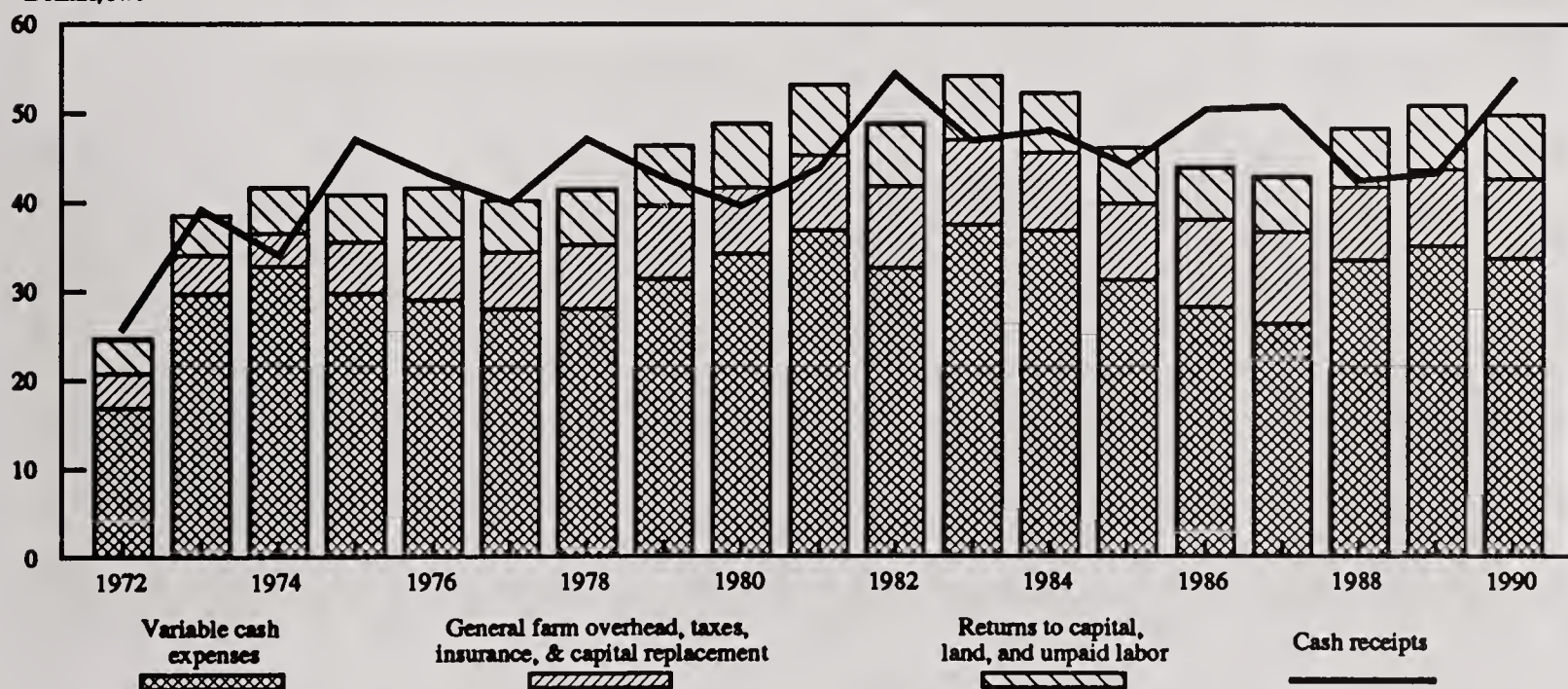




Figure 13  
Costs and returns of feeder pig production, 1972-90

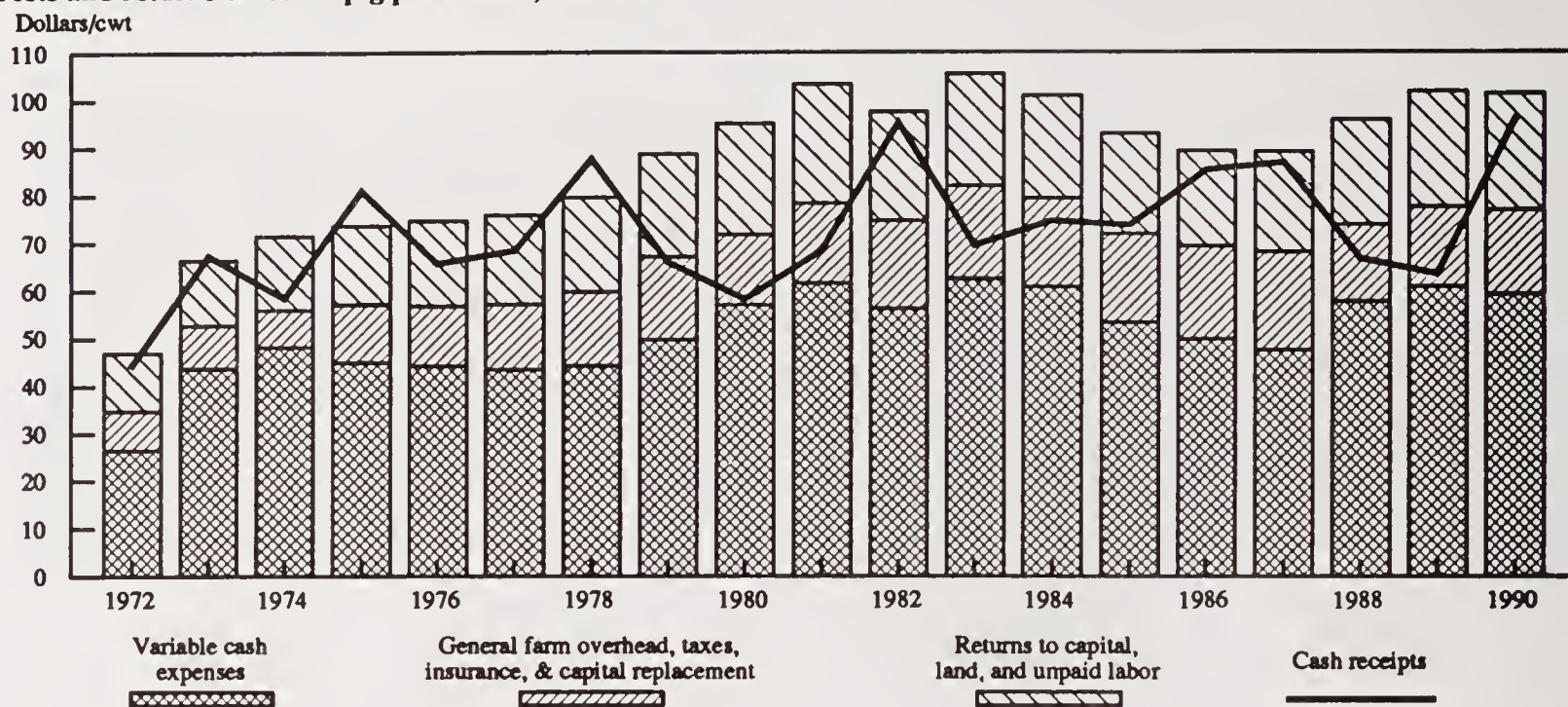


Figure 14  
Costs and returns of feeder pig finishing, 1972-90

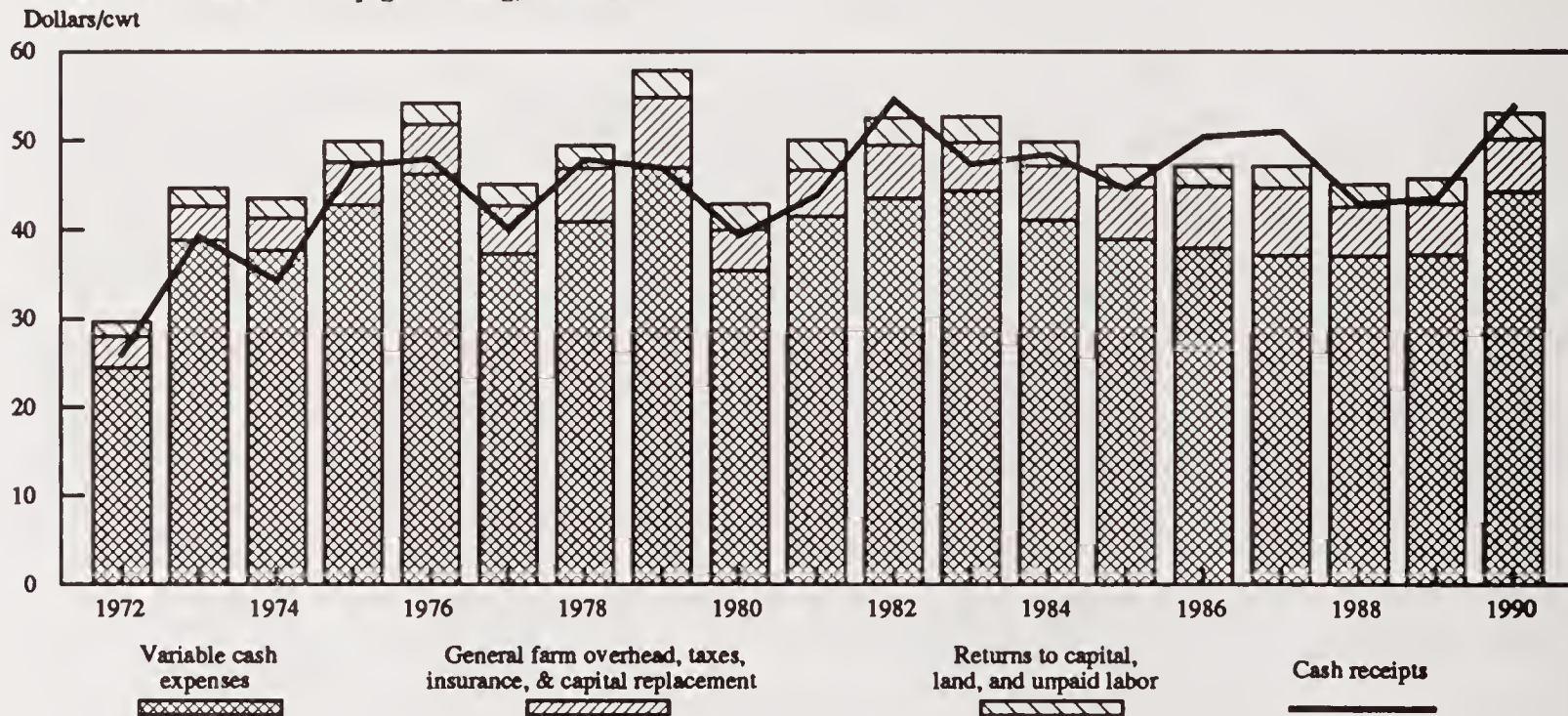
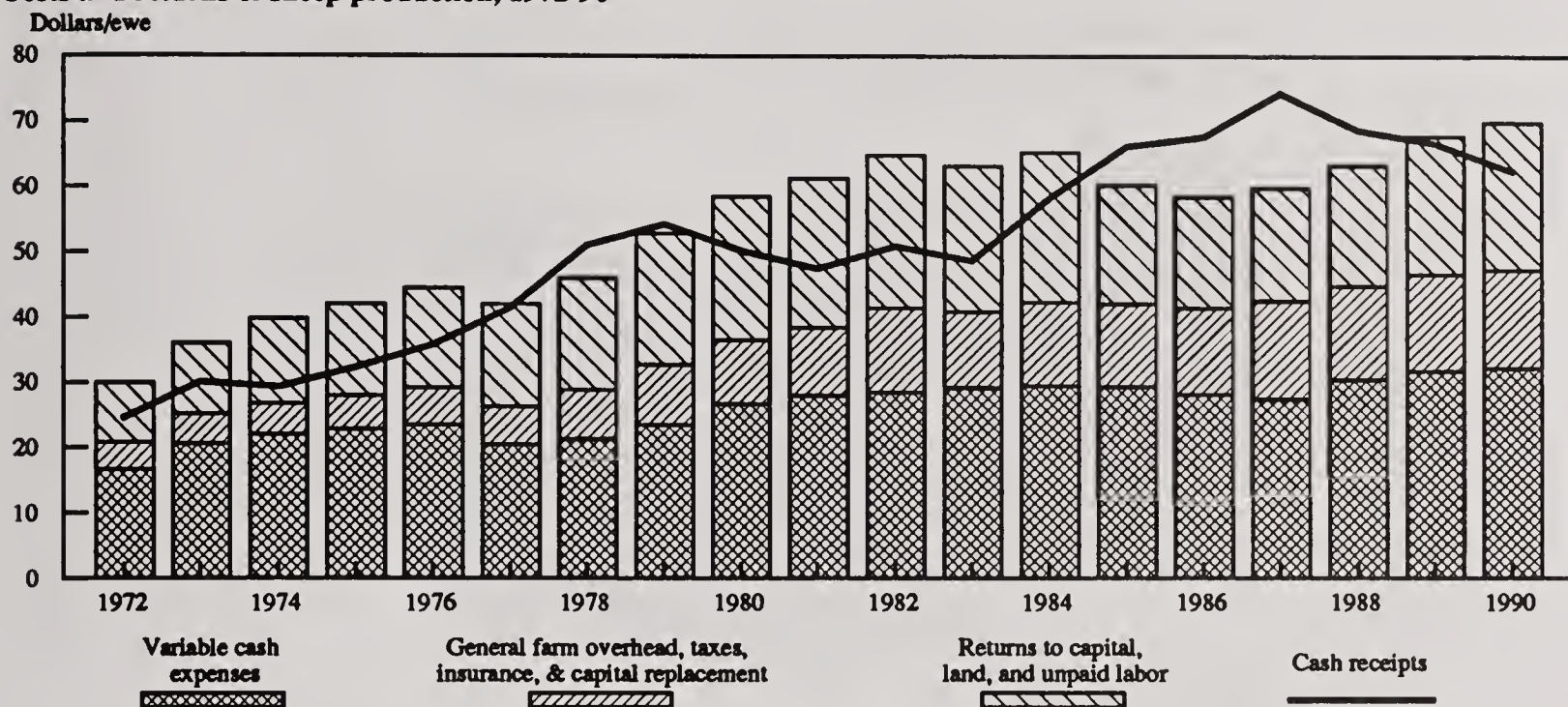
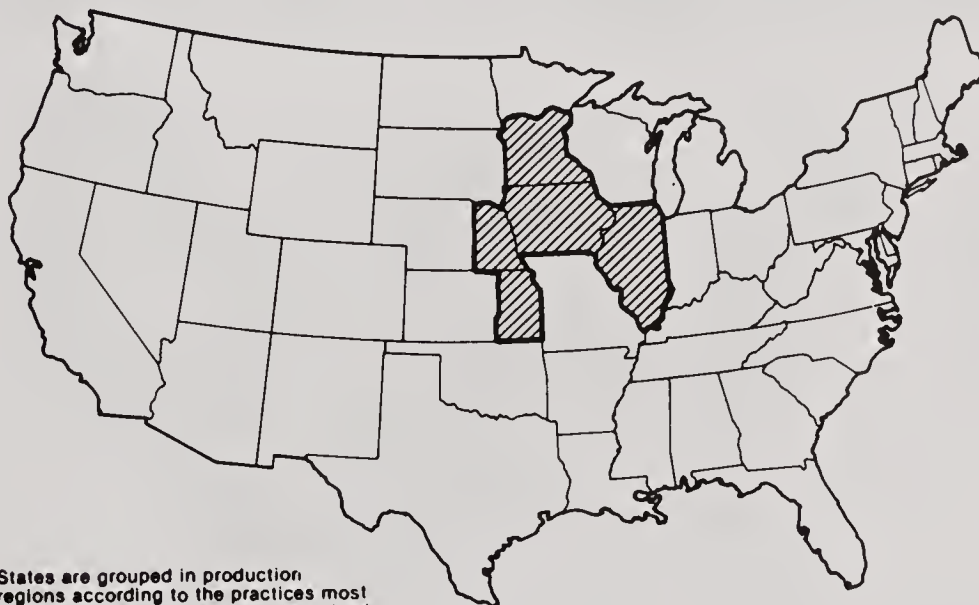




Figure 15  
Costs and returns of sheep production, 1972-90



### Fed Cattle Production Region



States are grouped in production regions according to the practices most prevalent in raising the particular animal. The boundaries of the production regions for one enterprise, therefore, are not necessarily the same as those for another enterprise.

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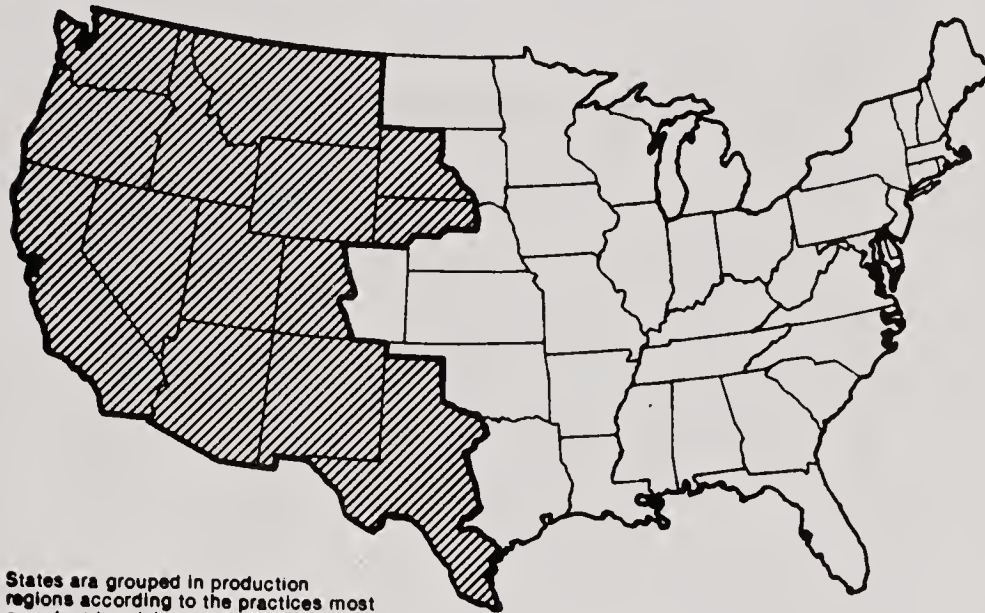


States are grouped in production regions according to the practices most prevalent in raising the particular animal. The boundaries of the production regions for one enterprise, therefore, are not necessarily the same as those for another enterprise.



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## Sheep Production Region



States are grouped in production regions according to the practices most prevalent in raising the particular animal. The boundaries of the production regions for one enterprise, therefore, are not necessarily the same as those for another enterprise.

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## Dairy Production Regions



States are grouped in production regions according to the practices most prevalent in raising the particular animal. The boundaries of the production regions for one enterprise, therefore, are not necessarily the same as those for another enterprise.

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Table 1A--U.S. milk production cash costs and returns, per cow, 1989-90

Item	1989	1990
<u>Dollars</u>		
Cash receipts:		
Milk	1,988.55	2,082.81
Cattle	198.50	215.66
Total	2,187.05	2,298.47
Cash expenses:		
Feed--		
Concentrates (8,034 lbs) 1/	590.70	637.13
Byproducts (1,020 lbs)	47.00	45.95
Hay (7,724 lbs)	199.50	204.22
Silage (15,848 lbs)	133.30	127.20
Pasture and other forage	21.50	20.59
Other--		
Milk hauling and marketing	85.70	91.01
Artificial insemination	17.70	18.72
Veterinary and medicine	30.60	31.96
Livestock hauling	3.80	4.00
Fuel, lube, and electricity	22.50	25.19
Machinery and building repairs	68.00	69.59
Hired labor	118.90	124.18
DHIA fees	7.60	8.04
Dairy supplies	30.90	31.94
Dairy assessment	0	.81
Miscellaneous	1.10	1.18
Total, variable cash expenses	1,378.80	1,441.71
General farm overhead	132.90	137.39
Taxes and insurance	29.00	30.34
Interest	109.80	108.35
Total, fixed cash expenses	271.70	276.08
Total, cash expenses	1,650.50	1,717.79
Cash receipts less cash expenses	536.55	580.68
Capital replacement	238.60	253.52
Total, cash expenses and replacement	1,889.10	1,971.31
Net cash returns	297.95	327.16

Table 1B--U.S. milk production economic costs and returns, per cow, 1989-90

Item	1989	1990
<u>Dollars</u>		
Total, cash receipts	2,187.34	2,298.47
Economic (full ownership) costs:		
Variable cash expenses	1,378.80	1,441.71
General farm overhead	132.90	137.39
Taxes and insurance	29.00	30.34
Capital replacement	238.60	253.52
Operating capital 2/	13.90	13.46
Other nonland capital 3/	82.30	88.88
Land 4/	31.30	31.87
Unpaid labor (49.11 hrs)	264.90	277.66
Total, economic costs	2,171.70	2,274.83
Residual returns to management and risk	15.35	23.64
Pounds of milk per unit	14,730	15,203

See footnotes at end of Table 55B.



Table 2A--U.S. milk production cash costs and returns, per cwt, 1989-90

Item	1989	1990
	<u>Dollars</u>	
Cash receipts:		
Milk	13.50	13.70
Cattle	1.35	1.42
Total	14.85	15.12
Cash expenses:		
Feed--		
Concentrates (54.5 lbs) 1/	4.01	4.19
Byproducts (6.9 lbs)	.32	.30
Hay (52.5 lbs)	1.35	1.34
Silage (107.6 lbs)	.90	.84
Pasture and other forage	.15	.14
Other--		
Milk hauling and marketing	.58	.60
Artificial insemination	.12	.12
Veterinary and medicine	.21	.21
Livestock hauling	.03	.03
Fuel, lube, and electricity	.15	.17
Machinery and building repairs	.46	.46
Hired labor	.81	.82
DHIA fees	.05	.05
Dairy supplies	.21	.21
Dairy assessment	0	.01
Miscellaneous	.01	.01
Total, variable cash expenses	9.36	9.50
General farm overhead	.90	.90
Taxes and insurance	.20	.20
Interest	.75	.71
Total, fixed cash expenses	1.85	1.81
Total, cash expenses	11.21	11.31
Cash receipts less cash expenses	3.64	3.81
Capital replacement	1.62	1.67
Total, cash expenses and replacement	12.83	12.98
Net cash returns	2.02	2.14

Table 2B--U.S. milk production economic costs and returns, per cwt, 1989-90

Item	1989	1990
	<u>Dollars</u>	
Total, cash receipts	14.85	15.12
Economic (full ownership) costs:		
Variable cash expenses	9.36	9.50
General farm overhead	.90	.90
Taxes and insurance	.20	.20
Capital replacement	1.62	1.67
Operating capital 2/	.09	.09
Other nonland capital 3/	.56	.58
Land 4/	.21	.21
Unpaid labor (0.33 hr)	1.80	1.83
Total, economic costs	14.74	14.98
Residual returns to management and risk	.11	.14

See footnotes at end of Table 55B.

Table 3A--Appalachia milk production cash costs and returns, per cow, 1989-90

Item	1989	1990
<u>Dollars</u>		
Cash receipts:		
Milk	1,880.34	2,025.38
Cattle	186.97	201.95
Total	2,067.31	2,227.33
Cash expenses:		
Feed--		
Concentrates (6,572 lbs) 1/	644.97	672.94
Byproducts (861 lbs)	34.08	34.08
Hay (7,771 lbs)	124.43	124.45
Silage (18,205 lbs)	113.21	121.59
Pasture and other forage	21.69	20.78
Other--		
Milk hauling and marketing	110.89	114.18
Artificial insemination	16.29	17.23
Veterinary and medicine	29.08	30.42
Livestock hauling	2.62	2.74
Fuel, lube, and electricity	22.81	25.77
Machinery and building repairs	53.38	54.74
Hired labor	152.45	157.35
DHIA fees	5.56	5.88
Dairy supplies	38.93	40.35
Dairy assessment	0	.73
Miscellaneous	2.85	2.95
Total, variable cash expenses	1,373.24	1,426.18
General farm overhead	111.22	115.27
Taxes and insurance	13.37	14.01
Interest	73.18	72.35
Total, fixed cash expenses	197.77	201.63
Total, cash expenses	1,571.01	1,627.81
Cash receipts less cash expenses	496.30	599.52
Capital replacement	213.32	228.11
Total, cash expenses and replacement	1,784.33	1,855.92
Net cash returns	282.98	371.41

Table 3B--Appalachia milk production economic costs and returns, per cow, 1989-90

Item	1989	1990
<u>Dollars</u>		
Total, cash receipts	2,067.31	2,227.33
Economic (full ownership) costs:		
Variable cash expenses	1,373.24	1,426.18
General farm overhead	111.22	115.27
Taxes and insurance	13.37	14.01
Capital replacement	213.32	228.11
Operating capital 2/	13.80	13.32
Other nonland capital 3/	68.49	74.16
Land 4/	46.85	45.40
Unpaid labor (61.66 hrs)	307.07	316.93
Total, economic costs	2,147.36	2,233.38
Residual returns to management and risk	-80.05	-6.05
Pounds of milk per unit	13,431	13,685

See footnotes at end of Table 55B.



Table 4A--Appalachia milk production cash costs and returns, per cwt, 1989-90

Item	1989	1990
<u>Dollars</u>		
Cash receipts:		
Milk	14.00	14.80
Cattle	1.39	1.48
Total	15.39	16.28
Cash expenses:		
Feed--		
Concentrates (48.9 lbs) 1/	4.80	4.92
Byproducts (6.4 lbs)	.25	.25
Hay (57.9 lbs)	.93	.91
Silage (135.5 lbs)	.84	.89
Pasture and other forage	.16	.15
Other--		
Milk hauling and marketing	.82	.83
Artificial insemination	.12	.13
Veterinary and medicine	.22	.22
Livestock hauling	.02	.02
Fuel, lube, and electricity	.17	.19
Machinery and building repairs	.40	.40
Hired labor	1.14	1.15
DHIA fees	.04	.04
Dairy supplies	.29	.29
Dairy assessment	0	.01
Miscellaneous	.02	.02
Total, variable cash expenses	10.22	10.42
General farm overhead	.83	.84
Taxes and insurance	.10	.10
Interest	.54	.53
Total, fixed cash expenses	1.47	1.47
Total, cash expenses	11.69	11.89
Cash receipts less cash expenses	3.70	4.39
Capital replacement	1.59	1.67
Total, cash expenses and replacement	13.28	13.56
Net cash returns	2.11	2.72

Table 4B--Appalachia milk production economic costs and returns, per cwt, 1989-90

Item	1989	1990
<u>Dollars</u>		
Total, cash receipts	15.39	16.28
Economic (full ownership) costs:		
Variable cash expenses	10.22	10.42
General farm overhead	.83	.84
Taxes and insurance	.10	.10
Capital replacement	1.59	1.67
Operating capital 2/	.10	.10
Other nonland capital 3/	.51	.54
Land 4/	.35	.33
Unpaid labor (0.46 hr)	2.29	2.32
Total, economic costs	15.99	16.32
Residual returns to management and risk	-.60	-.04

See footnotes at end of Table 55B.

Table 5A--Corn Belt milk production cash costs and returns, per cow, 1989-90

Item	1989	1990
<u>Dollars</u>		
Cash receipts:		
Milk	1,852.01	1,924.91
Cattle	218.89	236.95
Total	2,070.90	2,161.86
Cash expenses:		
Feed--		
Concentrates (8,153 lbs) 1/	582.85	626.35
Byproducts (333 lbs)	16.98	14.46
Hay (8,643 lbs)	173.91	156.01
Silage (11,133 lbs)	69.92	63.34
Pasture and other forage	28.08	25.80
Other--		
Milk hauling and marketing	88.46	93.51
Artificial insemination	15.30	16.19
Veterinary and medicine	39.81	41.65
Livestock hauling	2.86	3.00
Fuel, lube, and electricity	31.34	35.41
Machinery and building repairs	64.32	65.96
Hired labor	86.03	87.88
DHIA fees	8.63	9.13
Dairy supplies	31.35	32.49
Dairy assessment	0	.76
Miscellaneous	.64	.66
Total, variable cash expenses	1,240.48	1,272.60
General farm overhead	120.53	124.92
Taxes and insurance	26.49	27.77
Interest	128.81	127.34
Total, fixed cash expenses	275.83	280.03
Total, cash expenses	1,516.31	1,552.63
Cash receipts less cash expenses	554.59	609.23
Capital replacement	197.18	209.00
Total, cash expenses and replacement	1,713.49	1,761.63
Net cash returns	357.41	400.23

Table 5B--Corn Belt milk production economic costs and returns, per cow, 1989-90

Item	1989	1990
<u>Dollars</u>		
Total, cash receipts	2,070.90	2,161.86
Economic (full ownership) costs:		
Variable cash expenses	1,240.48	1,272.60
General farm overhead	120.53	124.92
Taxes and insurance	26.49	27.77
Capital replacement	197.18	209.00
Operating capital 2/	12.47	11.88
Other nonland capital 3/	78.15	84.62
Land 4/	69.54	71.65
Unpaid labor (75.37 hrs)	419.81	428.86
Total, economic costs	2,164.65	2,231.30
Residual returns to management and risk	-93.75	-69.44
Pounds of milk per unit	13,821	14,365

See footnotes at end of Table 55B.



Table 6A--Corn Belt milk production cash costs and returns, per cwt, 1989-90

Item	1989	1990
<u>Dollars</u>		
Cash receipts:		
Milk	13.40	13.40
Cattle	1.58	1.65
Total	14.98	15.05
Cash expenses:		
Feed--		
Concentrates (59 lbs) 1/	4.22	4.36
Byproducts (2.4 lbs)	.12	.10
Hay (62.5 lbs)	1.26	1.09
Silage (80.6 lbs)	.51	.44
Pasture and other forage	.20	.18
Other--		
Milk hauling and marketing	.64	.66
Artificial insemination	.11	.11
Veterinary and medicine	.29	.29
Livestock hauling	.02	.02
Fuel, lube, and electricity	.23	.25
Machinery and building repairs	.47	.46
Hired labor	.62	.61
DHIA fees	.06	.06
Dairy supplies	.23	.23
Dairy assessment	0	.01
Miscellaneous	0	0
Total, variable cash expenses	8.98	8.87
General farm overhead	.87	.87
Taxes and insurance	.19	.19
Interest	.93	.89
Total, fixed cash expenses	1.99	1.95
Total, cash expenses	10.97	10.82
Cash receipts less cash expenses	4.01	4.23
Capital replacement	1.43	1.45
Total, cash expenses and replacement	12.40	12.27
Net cash returns	2.58	2.78

Table 6B--Corn Belt milk production economic costs and returns, per cwt, 1989-90

Item	1989	1990
<u>Dollars</u>		
Total, cash receipts	14.98	15.05
Economic (full ownership) costs:		
Variable cash expenses	8.98	8.87
General farm overhead	.87	.87
Taxes and insurance	.19	.19
Capital replacement	1.43	1.45
Operating capital 2/	.09	.08
Other nonland capital 3/	.57	.59
Land 4/	.50	.50
Unpaid labor (0.55 hr)	3.04	2.99
Total, economic costs	15.67	15.54
Residual returns to management and risk	-.69	-.49

See footnotes at end of Table 55B.

Table 7A--Northeast milk production cash costs and returns, per cow, 1989-90

Item	1989	1990
<u>Dollars</u>		
Cash receipts:		
Milk	2,020.67	2,123.72
Cattle	186.50	203.57
Total	2,207.17	2,327.29
Cash expenses:		
Feed--		
Concentrates (7,764 lbs) 1/	647.98	688.88
Byproducts (445 lbs)	12.06	10.27
Hay (6,871 lbs)	140.80	147.31
Silage (21,307 lbs)	140.34	130.99
Pasture and other forage	21.88	22.38
Other--		
Milk hauling and marketing	89.54	92.43
Artificial insemination	20.97	22.19
Veterinary and medicine	31.43	32.88
Livestock hauling	3.10	3.25
Fuel, lube, and electricity	16.67	18.84
Machinery and building repairs	85.73	87.92
Hired labor	88.05	91.96
DHIA fees	9.69	10.25
Dairy supplies	33.39	34.60
Dairy assessment	0	.77
Miscellaneous	.22	.23
Total, variable cash expenses	1,341.85	1,395.15
General farm overhead	158.25	164.01
Taxes and insurance	35.76	37.48
Interest	117.42	116.08
Total, fixed cash expenses	311.43	317.57
Total, cash expenses	1,653.28	1,712.72
Cash receipts less cash expenses	553.89	614.57
Capital replacement	265.07	280.57
Total, cash expenses and replacement	1,918.35	1,993.29
Net cash returns	288.82	334.00

Table 7B--Northeast milk production economic costs and returns, per cow, 1989-90

Item	1989	1990
<u>Dollars</u>		
Total, cash receipts	2,207.17	2,327.29
Economic (full ownership) costs:		
Variable cash expenses	1,341.85	1,395.15
General farm overhead	158.25	164.01
Taxes and insurance	35.76	37.48
Capital replacement	265.07	280.57
Operating capital 2/	13.49	13.03
Other nonland capital 3/	97.76	105.85
Land 4/	37.17	36.21
Unpaid labor (61.23 hrs)	344.72	360.03
Total, economic costs	2,294.07	2,392.33
Residual returns to management and risk	-86.90	-65.04
Pounds of milk per unit	14,331	14,546

See footnotes at end of Table 55B.



Table 8A--Northeast milk production cash costs and returns, per cwt, 1989-90

Item	1989	1990
<u>Dollars</u>		
Cash receipts:		
Milk	14.10	14.60
Cattle	1.30	1.40
Total	15.40	16.00
Cash expenses:		
Feed--		
Concentrates (54.2 lbs) 1/	4.52	4.74
Byproducts (3.1 lbs)	.08	.07
Hay (47.9 lbs)	.98	1.01
Silage (148.7 lbs)	.98	.90
Pasture and other forage	.15	.15
Other--		
Milk hauling and marketing	.63	.64
Artificial insemination	.15	.15
Veterinary and medicine	.22	.23
Livestock hauling	.02	.02
Fuel, lube, and electricity	.12	.13
Machinery and building repairs	.60	.60
Hired labor	.61	.63
DHIA fees	.07	.07
Dairy supplies	.23	.24
Dairy assessment	0	.01
Miscellaneous	0	0
Total, variable cash expenses	9.36	9.59
General farm overhead	1.10	1.13
Taxes and insurance	.25	.26
Interest	.82	.80
Total, fixed cash expenses	2.17	2.19
Total, cash expenses	11.53	11.78
Cash receipts less cash expenses	3.87	4.22
Capital replacement	1.85	1.93
Total, cash expenses and replacement	13.38	13.71
Net cash returns	2.02	2.29

Table 8B--Northeast milk production economic costs and returns, per cwt, 1989-90

Item	1989	1990
<u>Dollars</u>		
Total, cash receipts	15.40	16.00
Economic (full ownership) costs:		
Variable cash expenses	9.36	9.59
General farm overhead	1.10	1.13
Taxes and insurance	.25	.26
Capital replacement	1.85	1.93
Operating capital 2/	.09	.09
Other nonland capital 3/	.68	.73
Land 4/	.26	.25
Unpaid labor (0.43 hr)	2.41	2.48
Total, economic costs	16.00	16.46
Residual returns to management and risk	-.60	-.46

See footnotes at end of Table 55B.

Table 9A--Pacific milk production cash costs and returns, per cow, 1989-90

Item	1989	1990
<u>Dollars</u>		
Cash receipts:		
Milk	2,101.25	2,144.76
Cattle	173.22	188.31
Total	2,274.47	2,333.07
Cash expenses:		
Feed--		
Concentrates (7,453 lbs) 1/	544.17	575.18
Byproducts (2,347 lbs)	125.99	123.15
Hay (8,727 lbs)	349.92	375.73
Silage (12,520 lbs)	129.23	136.83
Pasture and other forage	17.79	20.86
Other--		
Milk hauling and marketing	86.58	91.46
Artificial insemination	17.74	18.77
Veterinary and medicine	22.94	24.00
Livestock hauling	3.65	3.82
Fuel, lube, and electricity	33.46	36.37
Machinery and building repairs	55.09	56.49
Hired labor	166.71	167.73
DHIA fees	7.98	8.44
Dairy supplies	27.50	28.50
Dairy assessment	0	.93
Miscellaneous	.37	.38
Total, variable cash expenses	1,589.12	1,668.64
General farm overhead	106.67	110.55
Taxes and insurance	21.17	22.19
Interest	97.12	96.01
Total, fixed cash expenses	224.96	228.75
Total, cash expenses	1,814.08	1,897.39
Cash receipts less cash expenses	460.39	435.68
Capital replacement	200.06	212.93
Total, cash expenses and replacement	2,014.14	2,110.32
Net cash returns	260.33	222.75

Table 9B--Pacific milk production economic costs and returns, per cow, 1989-90

Item	1989	1990
<u>Dollars</u>		
Total, cash receipts	2,274.47	2,333.07
Economic (full ownership) costs:		
Variable cash expenses	1,589.12	1,668.64
General farm overhead	106.67	110.55
Taxes and insurance	21.17	22.19
Capital replacement	200.06	212.93
Operating capital 2/	15.97	15.58
Other nonland capital 3/	67.09	72.64
Land 4/	10.78	11.54
Unpaid labor (14.09 hrs)	92.43	92.99
Total, economic costs	2,103.29	2,207.06
Residual returns to management and risk	171.18	126.01
Pounds of milk per unit	16,810	17,580

See footnotes at end of Table 55B.



Table 10A--Pacific milk production cash costs and returns, per cwt, 1988-90

Item	1989	1990
<u>Dollars</u>		
Cash receipts:		
Milk	12.50	12.20
Cattle	1.03	1.07
Total	13.53	13.27
Cash expenses:		
Feed--		
Concentrates (44.3 lbs) 1/	3.24	3.27
Byproducts (14 lbs)	.75	.70
Hay (51.9 lbs)	2.08	2.14
Silage (74.5 lbs)	.77	.78
Pasture and other forage	.11	.12
Other--		
Milk hauling and marketing	.52	.52
Artificial insemination	.11	.11
Veterinary and medicine	.14	.14
Livestock hauling	.02	.02
Fuel, lube, and electricity	.20	.21
Machinery and building repairs	.33	.32
Hired labor	.99	.95
DHIA fees	.05	.05
Dairy supplies	.16	.16
Dairy assessment	0	.01
Miscellaneous	0	0
Total, variable cash expenses	9.47	9.50
General farm overhead	.63	.63
Taxes and insurance	.13	.13
Interest	.58	.55
Total, fixed cash expenses	1.34	1.31
Total, cash expenses	10.81	10.81
Cash receipts less cash expenses	2.72	2.46
Capital replacement	1.19	1.21
Total, cash expenses and replacement	12.00	12.02
Net cash returns	1.53	1.25

Table 10B--Pacific milk production economic costs and returns, per cwt, 1989-90

Item	1989	1990
<u>Dollars</u>		
Total, cash receipts	13.53	13.27
Economic (full ownership) costs:		
Variable cash expenses	9.47	9.50
General farm overhead	.63	.63
Taxes and insurance	.13	.13
Capital replacement	1.19	1.21
Operating capital 2/	.10	.09
Other nonland capital 3/	.40	.41
Land 4/	.06	.07
Unpaid labor (0.08 hr)	.55	.53
Total, economic costs	12.53	12.57
Residual returns to management and risk	1.00	.70

See footnotes at end of Table 55B.

Table 11A--Southeast milk production cash costs and returns, per cow, 1989-90

Item	1989	1990
<u>Dollars</u>		
Cash receipts:		
Milk	2,015.25	2,209.85
Cattle	151.37	161.30
Total	2,166.62	2,371.15
Cash expenses:		
Feed--		
Concentrates (11,867 lbs) 1/	966.36	1,021.33
Byproducts (2,990 lbs)	60.93	60.93
Hay (5,120 lbs)	132.12	145.92
Silage (5,325 lbs)	52.19	55.06
Pasture and other forage	13.02	16.01
Other--		
Milk hauling and marketing	134.94	142.92
Artificial insemination	13.02	13.77
Veterinary and medicine	27.86	29.15
Livestock hauling	1.86	1.95
Fuel, lube, and electricity	13.69	15.38
Machinery and building repairs	32.89	33.73
Hired labor	141.64	148.31
DHIA fees	2.91	3.08
Dairy supplies	25.26	26.18
Dairy assessment	0	.71
Miscellaneous	6.26	6.49
Total, variable cash expenses	1,624.95	1,720.92
General farm overhead	55.25	57.26
Taxes and insurance	11.30	11.84
Interest	49.18	48.62
Total, fixed cash expenses	115.73	117.72
Total, cash expenses	1,740.68	1,838.64
Cash receipts less cash expenses	425.94	532.51
Capital replacement	215.46	235.11
Total, cash expenses and replacement	1,956.14	2,073.75
Net cash returns	210.48	297.40

Table 11B--Southeast milk production economic costs and returns, per cow, 1989-90

Item	1989	1990
<u>Dollars</u>		
Total, cash receipts	2,166.62	2,371.15
Economic (full ownership) costs:		
Variable cash expenses	1,624.95	1,720.92
General farm overhead	55.25	57.26
Taxes and insurance	11.30	11.84
Capital replacement	215.46	235.11
Operating capital 2/	16.33	16.07
Other nonland capital 3/	49.93	54.06
Land 4/	13.61	14.74
Unpaid labor (12.85 hrs)	73.63	77.10
Total, economic costs	2,060.46	2,187.10
Residual returns to management and risk	106.16	184.05
Pounds of milk per unit	12,836	13,393

See footnotes at end of Table 55B.



Table 12A--Southeast milk production cash costs and returns, per cwt, 1989-90

Item	1989	1990
<u>Dollars</u>		
Cash receipts:		
Milk	15.70	16.50
Cattle	1.18	1.20
Total	16.88	17.70
Cash expenses:		
Feed--		
Concentrates (92.5 lbs) 1/	7.53	7.63
Byproducts (23.3 lbs)	.47	.45
Hay (39.9 lbs)	1.03	1.09
Silage (41.5 lbs)	.41	.41
Pasture and other forage	.10	.12
Other--		
Milk hauling and marketing	1.05	1.06
Artificial insemination	.10	.10
Veterinary and medicine	.22	.22
Livestock hauling	.01	.01
Fuel, lube, and electricity	.11	.11
Machinery and building repairs	.26	.25
Hired labor	1.10	1.11
DHIA fees	.02	.02
Dairy supplies	.20	.20
Dairy assessment	0	.01
Miscellaneous	.05	.05
Total, variable cash expenses	12.66	12.84
General farm overhead	.43	.43
Taxes and insurance	.09	.09
Interest	.38	.36
Total, fixed cash expenses	.90	.88
Total, cash expenses	13.56	13.72
Cash receipts less cash expenses	15.98	16.82
Capital replacement	1.68	1.76
Total, cash expenses and replacement	15.24	15.48
Net cash returns	1.64	2.22

Table 12B--Southeast milk production economic costs and returns, per cwt, 1989-90

Item	1989	1990
<u>Dollars</u>		
Total, cash receipts	16.88	17.70
Economic (full ownership) costs:		
Variable cash expenses	12.66	12.84
General farm overhead	.43	.43
Taxes and insurance	.09	.09
Capital replacement	1.68	1.76
Operating capital 2/	.13	.12
Other nonland capital 3/	.39	.40
Land 4/	.11	.11
Unpaid labor (0.1 hr)	.57	.58
Total, economic costs	16.06	16.33
Residual returns to management and risk	.82	1.37

See footnotes at end of Table 55B.

Table 13A--Southern Plains milk production cash costs and returns, per cow, 1989-90

Item	1989	1990
<u>Dollars</u>		
Cash receipts:		
Milk	1,949.23	2,151.20
Cattle	168.60	184.16
Total	2,117.83	2,335.36
Cash expenses:		
Feed--		
Concentrates (8,838 lbs) 1/	688.20	816.81
Byproducts (2,271 lbs)	77.38	80.25
Hay (8,048 lbs)	191.28	198.18
Silage (2,992 lbs)	49.49	49.61
Pasture and other forage	28.41	26.36
Other--		
Milk hauling and marketing	103.29	115.28
Artificial insemination	4.38	4.63
Veterinary and medicine	24.22	25.34
Livestock hauling	1.51	1.58
Fuel, lube, and electricity	13.51	15.24
Machinery and building repairs	38.35	39.33
Hired labor	156.39	156.39
DHIA fees	2.57	2.72
Dairy supplies	39.25	40.68
Dairy assessment	0	.78
Miscellaneous	.11	.11
Total, variable cash expenses	1,418.34	1,573.29
General farm overhead	73.07	75.73
Taxes and insurance	9.26	9.71
Interest	58.45	57.78
Total, fixed cash expenses	140.78	143.22
Total, cash expenses	1,559.12	1,716.51
Cash receipts less cash expenses	558.71	618.85
Capital replacement	274.87	298.20
Total, cash expenses and replacement	1,833.99	2,014.71
Net cash returns	283.84	320.65

Table 13B--Southern Plains milk production economic costs and returns, per cow, 1989-90

Item	1989	1990
<u>Dollars</u>		
Total, cash receipts	2,117.83	2,335.36
Economic (full ownership) costs:		
Variable cash expenses	1,418.34	1,573.29
General farm overhead	73.07	75.73
Taxes and insurance	9.26	9.71
Capital replacement	274.87	298.20
Operating capital 2/	14.25	14.69
Other nonland capital 3/	49.83	53.96
Land 4/	14.78	13.78
Unpaid labor (30.62 hrs)	163.82	163.82
Total, economic costs	2,018.22	2,203.18
Residual returns to management and risk	99.61	132.18
Pounds of milk per unit	13,631	14,634

See footnotes at end of Table 55B.



Table 14A--Southern Plains milk production cash costs and returns, per cwt, 1989-90

Item	1989	1990
<u>Dollars</u>		
Cash receipts:		
Milk	14.30	14.70
Cattle	1.24	1.26
Total	15.54	15.96
Cash expenses:		
Feed--		
Concentrates (64.8 lbs) 1/	5.05	5.58
Byproducts (16.7 lbs)	.57	.55
Hay (59 lbs)	1.40	1.35
Silage (22 lbs)	.36	.34
Pasture and other forage	.21	.18
Other--		
Milk hauling and marketing	.76	.79
Artificial insemination	.03	.03
Veterinary and medicine	.18	.17
Livestock hauling	.01	.01
Fuel, lube, and electricity	.10	.10
Machinery and building repairs	.28	.27
Hired labor	1.15	1.07
DHIA fees	.02	.02
Dairy supplies	.29	.28
Dairy assessment	0	.01
Miscellaneous	0	0
Total, variable cash expenses	10.41	10.75
General farm overhead	.54	.52
Taxes and insurance	.07	.07
Interest	.43	.39
Total, fixed cash expenses	1.04	.98
Total, cash expenses	11.45	11.73
Cash receipts less cash expenses	4.09	4.23
Capital replacement	2.02	2.04
Total, cash expenses and replacement	13.47	13.77
Net cash returns	2.07	2.19

Table 14B--Southern Plains milk production economic costs and returns, per cwt, 1989-90

Item	1989	1990
<u>Dollars</u>		
Total, cash receipts	15.54	15.96
Economic (full ownership) costs:		
Variable cash expenses	10.41	10.75
General farm overhead	.54	.52
Taxes and insurance	.07	.07
Capital replacement	2.02	2.04
Operating capital 2/	.10	.10
Other nonland capital 3/	.37	.37
Land 4/	.11	.09
Unpaid labor (0.22 hr)	1.20	1.12
Total, economic costs	14.82	15.06
Residual returns to management and risk	.72	.90

See footnotes at end of Table 55B.

Table 15A--Upper Midwest milk production cash costs and returns, per cow, 1989-90

Item	1989	1990
<u>Dollars</u>		
Cash receipts:		
Milk	1,951.71	2,005.29
Cattle	235.78	257.21
Total	2,187.49	2,262.50
Cash expenses:		
Feed--		
Concentrates (8,457 lbs) 1/	504.43	555.80
Byproducts (222 lbs)	18.93	16.13
Hay (7,570 lbs)	170.33	158.19
Silage (18,765 lbs)	182.20	162.08
Pasture and other forage	21.47	16.73
Other--		
Milk hauling and marketing	64.37	70.90
Artificial insemination	19.63	20.77
Veterinary and medicine	35.24	36.87
Livestock hauling	5.84	6.12
Fuel, lube, and electricity	18.91	21.33
Machinery and building repairs	79.85	81.89
Hired labor	95.92	105.95
DHIA fees	7.61	8.05
Dairy supplies	27.84	28.85
Dairy assessment	0	.79
Miscellaneous	1.71	1.77
Total, variable cash expenses	1,254.28	1,292.22
General farm overhead	164.72	170.72
Taxes and insurance	41.33	43.32
Interest	136.28	134.73
Total, fixed cash expenses	342.33	348.77
Total, cash expenses	1,596.61	1,640.99
Cash receipts less cash expenses	590.88	621.51
Capital replacement	261.83	277.86
Total, cash expenses and replacement	1,858.44	1,918.85
Net cash returns	329.05	343.65

Table 15B--Upper Midwest milk production economic costs and returns, per cow, 1989-90

Item	1989	1990
<u>Dollars</u>		
Total, cash receipts	2,187.49	2,262.50
Economic (full ownership) costs:		
Variable cash expenses	1,254.28	1,292.22
General farm overhead	164.72	170.72
Taxes and insurance	41.33	43.32
Capital replacement	261.83	277.86
Operating capital 2/	12.61	12.07
Other nonland capital 3/	97.60	105.68
Land 4/	31.81	34.79
Unpaid labor (62.84 hrs)	318.60	351.90
Total, economic costs	2,182.78	2,288.56
Residual returns to management and risk	4.71	-26.06
Pounds of milk per unit	14,565	14,854

See footnotes at end of Table 55B.



Table 16A--Upper Midwest milk production cash costs and returns, per cwt, 1989-90

Item	1989	1990
<u>Dollars</u>		
Cash receipts:		
Milk	13.40	13.50
Cattle	1.62	1.73
Total	15.02	15.23
=====		
Cash expenses:		
Feed--		
Concentrates (58.1 lbs) 1/	3.46	3.74
Byproducts (1.5 lbs)	.13	.11
Hay (52 lbs)	1.17	1.06
Silage (128.8 lbs)	1.25	1.09
Pasture and other forage	.15	.11
Other--		
Milk hauling and marketing	.44	.48
Artificial insemination	.13	.14
Veterinary and medicine	.24	.25
Livestock hauling	.04	.04
Fuel, lube, and electricity	.13	.14
Machinery and building repairs	.55	.55
Hired labor	.66	.71
DHIA fees	.05	.05
Dairy supplies	.19	.19
Dairy assessment	0	.01
Miscellaneous	.01	.01
Total, variable cash expenses	8.60	8.68
General farm overhead	1.13	1.15
Taxes and insurance	.28	.29
Interest	.94	.91
Total, fixed cash expenses	2.35	2.35
Total, cash expenses	10.95	11.03
Cash receipts less cash expenses	4.07	4.20
Capital replacement	1.80	1.87
Total, cash expenses and replacement	12.75	12.90
Net cash returns	2.27	2.33

Table 16B--Upper Midwest milk production economic costs and returns, per cwt, 1989-90

Item	1989	1990
<u>Dollars</u>		
Total, cash receipts	15.02	15.23
=====		
Economic (full ownership) costs:		
Variable cash expenses	8.60	8.68
General farm overhead	1.13	1.15
Taxes and insurance	.28	.29
Capital replacement	1.80	1.87
Operating capital 2/	.09	.08
Other nonland capital 3/	.67	.71
Land 4/	.22	.23
Unpaid labor (0.43 hr)	2.19	2.37
Total, economic costs	14.98	15.38
Residual returns to management and risk	.04	-.15

See footnotes at end of Table 55B.

Table 17A--U.S. fed cattle production cash costs and returns, all sizes of operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Fed beef (100 lbs) 1/	70.53	73.76	78.77
Total	70.53	73.76	78.77
Cash expenses:			
Feeders--			
Feeder cattle (58 lbs)	48.99	50.48	53.33
Feed--			
Haylage (20 lbs)	.07	.05	.04
Silage (140 lbs)	1.18	.81	.74
Dry grain & concentrates (261 lbs)	11.05	11.81	11.68
Protein supplements (26 lbs)	2.97	3.04	2.88
Legume hay (60 lbs)	1.20	1.29	1.29
Other roughage (19.4 lbs)	0	0	0
Pasture	0	0	0
Crop residue	0	0	0
Total feed costs	16.47	17.00	16.63
Other--			
Veterinary and medicine	.58	.62	.65
Livestock hauling	.24	.25	.26
Marketing	.06	.06	.06
Bedding	.06	.07	.07
Fuel, lube, and electricity	.48	.58	.64
Machinery and building repairs	.59	.61	.61
Hired labor (0.15 hr)	.78	.81	.83
Miscellaneous	.98	1.03	1.08
Manure credit	-.07	-.07	-.07
Total, variable cash expenses	69.16	71.44	74.09
General farm overhead	.87	.91	.95
Taxes and insurance	.17	.17	.17
Hired management	.13	.13	.13
Interest	4.54	4.36	4.32
Total, fixed cash expenses	5.71	5.57	5.57
Total, cash expenses	74.87	77.01	79.66
Cash receipts less cash expenses	-4.34	-3.25	-.89
Capital replacement 2/	1.18	1.23	1.21
Total, cash expenses and replacement	76.05	78.24	80.87
Net cash returns	-5.52	-4.48	-2.10

Table 17B--U.S. fed cattle production economic costs and returns, all sizes of operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	70.53	73.76	78.77
Economic (full ownership) costs:			
Variable cash expenses	69.16	71.44	74.09
General farm overhead	.87	.91	.95
Taxes and insurance	.17	.17	.17
Capital replacement	1.18	1.23	1.21
Hired management	.13	.13	.13
Operating capital 3/	.97	1.16	1.12
Other nonland capital 4/	.28	.31	.32
Land 5/	.05	.05	.06
Unpaid labor (0.11 hr)	.57	.63	.58
Total, economic costs	73.38	76.03	78.63
Residual returns to management and risk	-2.85	-2.27	.14

See footnotes at end of Table 55B.



Table 18A--Fed cattle production cash costs and returns, commercial feedlots,  
all sizes of operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Fed beef (100 lbs) 1/	70.65	73.88	78.90
Total	70.65	73.88	78.90
Cash expenses:			
Feeders--			
Feeder cattle (65 lbs)	50.89	52.46	55.29
Feed--			
Silage (20 lbs)	.29	.21	.23
Dry grain & concentrates (248 lbs)	11.01	11.77	11.64
Protein supplements (25 lbs)	2.86	2.91	2.76
Hay and other roughage	1.18	1.21	1.28
Total feed costs	15.34	16.10	15.91
Other--			
Veterinary and medicine	.55	.59	.62
Fuel, lube, and electricity	.37	.42	.48
Machinery and building repairs	.32	.34	.35
Hired labor (0.14 hr)	.81	.83	.86
Miscellaneous	1.30	1.37	1.42
Manure credit	-.07	-.07	-.07
Total, variable cash expenses	69.51	72.04	74.86
Taxes and insurance	.07	.07	.07
Hired management	.15	.16	.16
Interest	3.62	3.48	3.45
Total, fixed cash expenses	3.84	3.71	3.68
Total, cash expenses	73.35	75.75	78.54
Cash receipts less cash expenses	-2.70	-1.87	.36
Capital replacement 2/	.49	.51	.52
Total, cash expenses and replacement	73.84	76.26	79.06
Net cash returns	-3.19	-2.38	-.16

Table 18A--Fed cattle production economic costs and returns, commercial feedlots,  
all sizes of operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	70.65	73.88	78.90
Economic (full ownership) costs:			
Variable cash expenses	69.51	72.04	74.86
Taxes and insurance	.07	.07	.07
Hired management	.15	.16	.16
Capital replacement	.49	.51	.52
Operating capital 3/	.97	1.16	1.12
Other nonland capital 4/	.13	.14	.15
Land 5/	.02	.02	.02
Unpaid labor	0	0	0
Total, economic costs	71.34	74.10	76.90
Residual returns to management and risk	-.69	-.22	2.00

See footnotes at end of Table 55B.

Table 19A--Fed cattle production cash costs and returns, farmer feedlots, all sizes of operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Fed beef (100 lbs) 1/	69.93	73.11	78.07
Total	69.93	73.11	78.07
Cash expenses:			
Feeders--			
Feeder cattle (46 lbs)	39.19	40.39	42.56
Feed--			
Haylage (60 lbs)	.40	.32	.27
Silage (360 lbs)	5.74	3.87	3.53
Dry grain & concentrates (280 lbs)	11.25	12.04	11.90
Protein supplements (27 lbs)	3.54	3.74	3.54
Legume hay (68 lbs)	1.31	1.66	1.33
Pasture	.01	.01	.01
Crop residue	.00	.00	.00
Total feed costs	22.25	21.64	20.58
Other--			
Veterinary and medicine	.74	.80	.84
Livestock hauling	.79	.85	.89
Marketing	.36	.38	.40
Bedding	.37	.40	.42
Fuel, lube, and electricity	1.02	1.36	1.54
Machinery and building repairs	1.94	2.01	2.05
Hired labor (0.11 hr)	.63	.69	.68
Manure credit	-.08	-.08	-.08
Total, variable cash expenses	67.21	68.44	69.88
General farm overhead	2.93	3.08	3.19
Taxes and insurance	.66	.66	.67
Interest	7.49	7.20	7.13
Total, fixed cash expenses	11.08	10.94	10.99
Total, cash expenses	78.29	79.38	80.87
Cash receipts less cash expenses	-8.36	-6.27	-2.80
Capital replacement 2/	4.73	4.88	4.97
Total, cash expenses and replacement	83.02	84.26	85.84
Net cash returns	-13.09	-11.15	-7.77

Table 19B-- Fed cattle production economic costs and returns, farmer feedlots, all sizes of operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	69.93	73.11	78.07
Economic (full ownership) costs:			
Variable cash expenses	67.21	68.44	69.88
General farm overhead	2.93	3.08	3.19
Taxes and insurance	.66	.66	.67
Capital replacement	4.73	4.88	4.97
Operating capital 3/	.97	1.15	1.09
Other nonland capital 4/	1.07	1.17	1.27
Land 5/	.19	.23	.25
Unpaid labor (0.65 hr)	3.52	3.86	3.77
Total, economic costs	81.28	83.47	85.09
Residual returns to management and risk	-11.35	-10.36	-7.02

See footnotes at end of Table 55B.



Table 20A--U.S. cow-calf production cash costs and returns, all sizes of operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cow</u>			
Cash receipts:			
Steer calves (1.127 cwt) 1/	106.29	109.95	116.19
Heifer calves (0.797 cwt)	68.24	70.06	73.61
Yearling steers (1.067 cwt)	88.81	93.41	98.56
Yearling heifers (0.765 cwt)	60.44	62.68	66.26
Cull cows (0.809 cwt)	35.91	36.05	40.17
Total	359.69	372.15	394.79
Cash expenses:			
Feed--			
Grain (2.05 cwt)	9.49	9.85	9.22
Silage (0.29 ton)	7.00	4.66	4.88
Protein supplements (1.47 cwt)	18.64	20.30	19.19
Salt and minerals (0.33 cwt)	1.98	2.07	2.10
Hay (1.25 ton)	44.02	34.58	35.72
Pasture	34.89	39.62	36.79
Public grazing	.75	.88	.91
Crop residue (purchased)	.08	.10	.09
Total feed costs	116.85	112.06	108.90
Other--			
Veterinary and medicine	6.91	7.52	7.86
Livestock hauling	1.89	2.01	2.10
Marketing	4.54	4.98	5.15
Custom feed mixing	.52	.60	.62
Fuel, lube, electricity	12.71	14.94	17.51
Machinery and building repairs	22.81	23.58	24.02
Hired labor (3.20 hrs)	15.06	17.40	18.10
Total, variable cash expenses	181.29	183.09	184.26
General farm overhead	25.01	26.33	27.21
Taxes and insurance	30.05	30.08	30.43
Interest	49.88	47.98	47.50
Total, fixed cash expenses	104.94	104.39	105.14
Total, cash expenses	286.23	287.48	289.40
Cash receipts less cash expenses	73.46	84.67	105.39
Capital replacement 2/	66.62	67.38	69.21
Total, cash expenses and replacement	352.85	354.86	358.61
Net cash returns	6.84	17.29	36.18

Table 20B--U.S. cow-calf production economic costs and returns, all sizes of operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cow</u>			
Total, cash receipts	359.69	372.15	394.79
Economic (full ownership) costs:			
Variable cash expenses	181.29	183.09	184.26
General farm overhead	25.01	26.33	27.21
Taxes and insurance	30.05	30.08	30.43
Capital replacement	66.62	67.38	69.21
Operating capital 3/	6.27	7.36	6.88
Other nonland capital 4/	29.93	31.95	36.11
Land 5/	74.35	82.19	87.05
Unpaid labor (27.58 hrs)	87.05	89.39	91.57
Total, economic costs	500.57	517.77	532.72
Residual returns to management and risk	-140.88	-145.62	-137.93

See footnotes at end of Table 55B.

Table 21A--Cow-calf production cash costs and returns, operations with fewer than 100 cows, 1988-90

Item	1988	1989	1990
<u>Dollars per cow</u>			
Cash receipts:			
Steer calves (1.244 cwt) 1/	117.96	122.86	129.94
Heifer calves (0.85 cwt)	72.62	75.56	79.48
Yearling steers (0.885 cwt)	74.10	76.87	81.05
Yearling heifers (0.722 cwt)	56.79	57.64	60.89
Cull cows (0.753 cwt)	33.62	32.79	36.51
Total	355.09	365.72	387.87
Cash expenses:			
Feed--			
Grain (2.17 cwt)	9.82	10.45	9.84
Silage (0.27 ton)	6.73	4.24	4.45
Protein supplements (1.24 cwt)	15.87	17.07	16.13
Salt and minerals (0.33 cwt)	1.98	2.06	2.09
Hay (1.4 ton)	54.09	41.97	42.81
Pasture	28.69	33.71	31.19
Public grazing	.38	.47	.49
Total feed costs	117.56	109.97	107.00
Other--			
Veterinary and medicine	6.95	7.65	7.99
Livestock hauling	1.56	1.55	1.63
Marketing	5.12	5.89	6.11
Custom feed mixing	.63	.80	.83
Fuel, lube, electricity	15.32	18.66	21.92
Machinery and building repairs	27.51	29.19	29.73
Hired labor (1.39 hrs)	6.57	7.99	8.18
Total, variable cash expenses	181.22	181.70	183.39
General farm overhead	24.64	25.94	26.80
Taxes and insurance	32.20	31.37	31.48
Interest	49.14	47.27	46.80
Total, fixed cash expenses	105.98	104.58	105.08
Total, cash expenses	287.20	286.28	288.47
Cash receipts less cash expenses	67.89	79.44	99.40
Capital replacement	79.57	81.96	84.00
Total, cash expenses and replacement	366.77	368.24	372.47
Net cash returns	-11.68	-2.52	15.40

Table 21B--U.S. cow-calf production economic costs and returns, operations with fewer than 100 cows, 1988-90

Item	1988	1989	1990
<u>Dollars per cow</u>			
Total, cash receipts	355.09	365.72	387.87
Economic (full ownership) costs:			
Variable cash expenses	181.22	181.70	183.39
General farm overhead	24.64	25.94	26.80
Taxes and insurance	32.20	31.37	31.48
Capital replacement	79.57	81.96	84.00
Operating capital 3/	6.27	7.30	6.85
Other nonland capital 4/	33.46	35.90	40.39
Land 5/	75.98	84.95	89.28
Unpaid labor (37.73 hrs)	119.80	126.79	129.51
Total, economic costs	553.14	575.91	591.70
Residual returns to management and risk	-198.05	-210.19	-203.83

See footnotes at end of Table 55B.

Table 22A--U.S. cow-calf production cash costs and returns, operations with  
100-499 cows, 1988-90

Item	1988	1989	1990
<u>Dollars per cow</u>			
<b>Cash receipts:</b>			
Steer calves (1.072 cwt) 1/	100.77	105.46	111.44
Heifer calves (0.79 cwt)	68.18	69.86	73.33
Yearling steers (1.198 cwt)	99.61	101.97	107.59
Yearling heifers (0.792 cwt)	63.08	65.30	69.08
Cull cows (0.877 cwt)	38.74	38.88	43.37
<b>Total</b>	<b>370.38</b>	<b>381.47</b>	<b>404.81</b>
<b>Cash expenses:</b>			
<b>Feed--</b>			
Grain (2.42 cwt)	11.36	11.49	10.69
Silage (0.39 ton)	9.11	6.33	6.57
Protein supplements (1.83 cwt)	23.41	25.18	23.85
Salt and minerals (0.34 cwt)	1.96	2.05	2.08
Hay (1.24 ton)	36.10	29.92	31.53
Pasture	39.28	42.46	39.50
Public grazing	1.17	1.29	1.32
Crop residue	.27	.28	.28
<b>Total feed costs</b>	<b>122.66</b>	<b>119.00</b>	<b>115.82</b>
<b>Other--</b>			
Veterinary and medicine	7.37	7.88	8.24
Livestock hauling	1.99	2.14	2.24
Marketing	4.15	4.35	4.50
Custom feed mixing	.52	.53	.56
Fuel, lube, electricity	11.30	13.10	15.33
Machinery and building repairs	18.97	19.54	19.88
Hired labor (4.39 hrs)	20.47	22.02	22.93
<b>Total, variable cash expenses</b>	<b>187.43</b>	<b>188.56</b>	<b>189.50</b>
<b>General farm overhead</b>	<b>25.83</b>	<b>27.19</b>	<b>28.10</b>
<b>Taxes and insurance</b>	<b>30.43</b>	<b>31.55</b>	<b>32.08</b>
<b>Interest</b>	<b>51.51</b>	<b>49.55</b>	<b>49.06</b>
<b>Total, fixed cash expenses</b>	<b>107.77</b>	<b>108.29</b>	<b>109.24</b>
<b>Total, cash expenses</b>	<b>295.20</b>	<b>296.85</b>	<b>298.74</b>
<b>Cash receipts less cash expenses</b>	<b>75.18</b>	<b>84.62</b>	<b>106.07</b>
<b>Capital replacement 2/</b>	<b>55.52</b>	<b>56.33</b>	<b>57.94</b>
<b>Total, cash expenses and replacement</b>	<b>350.72</b>	<b>353.18</b>	<b>356.68</b>
<b>Net cash returns</b>	<b>19.66</b>	<b>28.29</b>	<b>48.13</b>

Table 22B--U.S. cow-calf production economic costs and returns, operation with  
100-499 cows, 1988-90

Item	1988	1989	1990
<u>Dollars per cow</u>			
<b>Total, cash receipts</b>	<b>370.38</b>	<b>381.47</b>	<b>404.81</b>
<b>Economic (full ownership) costs:</b>			
Variable cash expenses	187.43	188.56	189.50
General farm overhead	25.83	27.19	28.10
Taxes and insurance	30.43	31.55	32.08
Capital replacement	55.52	56.33	57.94
Operating capital 3/	6.49	7.58	7.08
Other nonland capital 4/	26.76	28.68	32.52
Land 5/	81.79	89.63	95.52
Unpaid labor (20.54 hrs)	63.79	68.26	70.53
<b>Total, economic costs</b>	<b>478.04</b>	<b>497.78</b>	<b>513.27</b>
<b>Residual returns to management and risk</b>	<b>-107.66</b>	<b>-116.31</b>	<b>-108.46</b>

See footnotes at end of Table 55B.



Table 23A--U.S. cow-calf production cash costs and returns, operations with  
500 or more cows, 1988-90

Item	1988	1989	1990
<u>Dollars per cow</u>			
Cash receipts:			
Steer calves (0.811 cwt) 1/	75.13	79.45	83.79
Heifer calves (0.615 cwt)	52.08	53.48	56.11
Yearling steers (1.451 cwt)	119.66	126.72	133.74
Yearling heifers (0.867 cwt)	68.30	72.95	77.14
Cull cows (0.866 cwt)	38.22	40.30	44.82
Total	353.39	372.90	395.60
Cash expenses:			
Feed--			
Grain (0.79 cwt)	4.19	4.63	4.28
Silage (0.14 ton)	3.10	2.29	2.43
Protein supplements (1.54 cwt)	18.64	20.37	19.18
Salt and minerals (0.34 cwt)	2.01	2.16	2.19
Hay (0.69 ton)	24.15	21.50	22.70
Pasture	48.25	51.99	48.43
Public grazing	1.17	1.32	1.35
Total feed costs	101.51	104.26	100.56
Other--			
Veterinary and medicine	5.77	6.38	6.64
Livestock hauling	2.92	3.15	3.30
Marketing	3.28	3.47	3.59
Custom feed mixing	.12	.13	.14
Fuel, lube, electricity	6.20	7.33	8.53
Machinery and building repairs	13.85	14.67	15.08
Hired labor (7.19 hrs)	34.34	36.53	38.28
Total, variable cash expenses	167.99	175.92	176.12
General farm overhead	24.66	25.96	26.82
Taxes and insurance	21.41	23.22	23.94
Interest	49.17	47.30	46.83
Total, fixed cash expenses	95.24	96.48	97.59
Total, cash expenses	263.23	272.40	273.71
Cash receipts less cash expenses	90.16	100.50	121.89
Capital replacement 2/	43.03	45.31	47.11
Total, cash expenses and replacement	306.26	317.71	320.82
Net cash returns	47.13	55.19	74.78

Table 23B--U.S. cow-calf production economic costs and returns, operations with  
500 or more cows, 1988-90

Item	1988	1989	1990
<u>Dollars per cow</u>			
Total, cash receipts	353.39	372.90	395.60
Economic (full ownership) costs:			
Variable cash expenses	167.99	175.92	176.12
General farm overhead	24.66	25.96	26.82
Taxes and insurance	21.41	23.22	23.94
Capital replacement	43.03	45.31	47.11
Operating capital 3/	5.81	7.07	6.58
Other nonland capital 4/	23.78	26.52	30.34
Land 5/	52.11	58.18	62.84
Unpaid labor (5.74 hrs)	17.25	18.41	19.06
Total, economic costs	356.04	380.59	392.81
Residual returns to management and risk	-2.65	-7.69	2.79

See footnotes at end of Table 55B.

Table 24A--Cow-calf production cash costs and returns, all sizes of operation,  
Great Plains, 1988-90

Item	1988	1989	1990
<u>Dollars per cow</u>			
<b>Cash receipts:</b>			
Steer calves (1.045 cwt) 1/	98.68	103.30	109.36
Heifer calves (0.821 cwt)	72.38	73.87	77.67
Yearling steers (1.218 cwt)	105.03	109.49	115.30
Yearling heifers (0.845 cwt)	69.71	72.81	76.88
Cull cows (0.624 cwt)	26.81	27.89	31.12
Total	372.61	387.36	410.33
<b>Cash expenses:</b>			
<b>Feed--</b>			
Grain (1.86 cwt)	9.07	8.77	7.77
Silage (0.38 ton)	8.15	6.25	6.69
Protein supplements (2.28 cwt)	27.89	29.79	28.13
Salt and minerals (0.35 cwt)	1.96	2.07	2.10
Hay (1.09 ton)	33.27	27.34	29.47
Pasture	32.81	35.76	32.95
Public grazing	.94	.98	1.01
Crop residue	.21	.22	.22
Total feed costs	114.30	111.18	108.34
<b>Other--</b>			
Veterinary and medicine	6.88	7.45	7.79
Livestock hauling	1.67	1.81	1.89
Marketing	5.48	5.80	5.99
Custom feed mixing	.60	.64	.66
Fuel, lube, electricity	13.08	15.46	17.88
Machinery and building repairs	20.86	21.86	22.26
Hired labor (3.03 hrs)	13.08	14.17	14.19
Total, variable cash expenses	175.95	178.37	179.00
General farm overhead	25.74	27.10	28.00
Taxes and insurance	25.52	26.87	27.20
Interest	51.33	49.38	48.89
Total, fixed cash expenses	102.59	103.35	104.09
Total cash expenses	278.54	281.72	283.09
Cash receipts less cash expenses	94.07	105.64	127.24
Capital replacement 2/	59.55	61.57	63.42
Total, cash expenses and replacement	338.09	343.29	346.51
Net cash returns	34.52	44.07	63.82

Table 24B--Cow-calf production economic costs and returns, all sizes of operation,  
Great Plains, 1988-90

Item	1988	1989	1990
<u>Dollars per cow</u>			
Total, cash receipts	372.61	387.36	410.33
<b>Economic (full ownership) costs:</b>			
Variable cash expenses	175.95	178.37	179.00
General farm overhead	25.74	27.10	28.00
Taxes and insurance	25.52	26.87	27.20
Capital replacement	59.55	61.57	63.42
Operating capital 3/	6.09	7.17	6.69
Other nonland capital 4/	27.31	29.86	33.79
Land 5/	71.11	75.92	80.50
Unpaid labor (22.67 hrs)	74.75	79.92	80.49
Total, economic costs	466.02	486.78	499.09
Residual returns to management and risk	-93.41	-99.42	-88.76

See footnotes at end of Table 55B.

Table 25A--Cow-calf production cash costs and returns, all sizes of operation,  
North-Central, 1988-90

Item	1988	1989	1990
<u>Dollars per cow</u>			
Cash receipts:			
Steer calves (1.211 cwt) 1/	114.24	116.73	123.43
Heifer calves (0.74 cwt)	62.76	63.66	66.87
Yearling steers (0.96 cwt)	79.93	86.48	91.10
Yearling heifers (0.808 cwt)	62.01	64.43	67.97
Cull cows (0.999 cwt)	45.96	47.76	53.21
Total	364.90	379.06	402.58
Cash expenses:			
Feed--			
Grain (2.42 cwt)	9.41	10.09	9.99
Silage (0.45 ton)	14.13	10.34	9.44
Protein supplements (1.02 cwt)	14.53	16.63	15.76
Salt and minerals (0.32 cwt)	2.02	2.10	2.13
Hay (1.46 ton)	67.66	53.27	47.05
Pasture	14.79	17.24	15.88
Total feed costs	122.54	109.67	100.25
Other--			
Veterinary and medicine	6.62	7.44	7.78
Livestock hauling	2.07	2.11	2.21
Marketing	2.96	3.21	3.32
Custom feed mixing	.14	.17	.17
Fuel, lube, electricity	11.86	13.85	15.96
Machinery and building repairs	24.09	24.58	25.08
Hired labor (0.85 hr)	4.01	5.76	6.27
Total, variable cash expenses	174.29	166.79	161.04
General farm overhead	26.88	28.29	29.23
Taxes and insurance	47.53	54.78	54.38
Interest	53.59	51.55	51.04
Total, fixed cash expenses	128.00	134.62	134.65
Total, cash expenses	302.29	301.41	295.69
Cash receipts less cash expenses	62.61	77.65	106.89
Capital replacement 2/	74.72	74.88	76.54
Total, cash expenses and replacement	377.01	376.29	372.23
Net cash returns	-12.11	2.77	30.35

Table 25B--Cow-calf production economic costs and returns, all sizes of operation,  
North-Central, 1988-90

Item	1988	1989	1990
<u>Dollars per cow</u>			
Total, cash receipts	364.90	379.06	402.58
Economic (full ownership) costs:			
Variable cash expenses	174.29	166.79	161.04
General farm overhead	26.88	28.29	29.23
Taxes and insurance	47.53	54.78	54.38
Capital replacement	74.72	74.88	76.54
Operating capital 3/	6.03	6.70	6.01
Other nonland capital 4/	34.34	36.68	41.38
Land 5/	73.30	90.92	94.21
Unpaid labor (34.8 hrs)	110.62	112.46	109.74
Total, economic costs	547.71	571.50	572.53
Residual returns to management and risk	-182.81	-192.44	-169.95

See footnotes at end of Table 55B.



Table 26A--Cow-calf production cash costs and returns, all sizes of operation,  
South, 1988-90

Item	1988	1989	1990
<u>Dollars per cow</u>			
Cash receipts:			
Steer calves (1.341 cwt) 1/	127.55	133.17	140.97
Heifer calves (0.91 cwt)	73.59	74.94	78.91
Yearling steers (0.543 cwt)	41.52	42.73	45.10
Yearling heifers (0.408 cwt)	28.53	29.50	31.26
Cull cows (0.875 cwt)	40.21	41.35	46.06
Total	311.40	321.69	342.30
Cash expenses:			
Feed--			
Grain (2.43 cwt)	11.42	12.25	12.13
Silage (0.22 ton)	4.50	3.34	3.67
Protein supplements (0.76 cwt)	10.31	10.85	10.14
Salt and minerals (0.27 cwt)	1.94	2.02	2.05
Hay (1.23 ton)	47.90	39.05	39.19
Pasture	53.97	56.23	51.72
Total feed costs	130.04	123.74	118.90
Other--			
Veterinary and medicine	6.48	6.96	7.24
Livestock hauling	1.02	1.09	1.15
Marketing	4.14	4.37	4.51
Custom feed mixing	1.32	1.42	1.49
Fuel, lube, electricity	13.69	15.95	18.56
Machinery and building repairs	27.03	28.01	28.61
Hired labor (3.31 hrs)	17.46	18.14	18.92
Total, variable cash expenses	201.18	199.68	199.38
General farm overhead	21.32	22.44	23.19
Taxes and insurance	27.90	29.75	29.18
Interest	42.51	40.89	40.49
Total, fixed cash expenses	91.73	93.08	92.86
Total, cash expenses	292.91	292.76	292.24
Cash receipts less cash expenses	18.49	28.93	50.06
Capital replacement 2/	83.03	85.36	87.37
Total, cash expenses and replacement	375.94	378.12	379.61
Net cash returns	-64.54	-56.43	-37.31

Table 26B--Cow-calf production economic costs and returns, all sizes of operation,  
South, 1988-90

Item	1988	1989	1990
<u>Dollars per cow</u>			
Total, cash receipts	311.40	321.69	342.30
Economic (full ownership) costs:			
Variable cash expenses	201.18	199.68	199.38
General farm overhead	21.32	22.44	23.19
Taxes and insurance	27.90	29.75	29.18
Capital replacement	83.03	85.36	87.37
Operating capital 3/	6.96	8.03	7.45
Other nonland capital 4/	35.06	38.03	42.91
Land 5/	105.43	118.32	122.75
Unpaid labor (33.03 hrs)	95.46	100.04	104.99
Total, economic costs	576.34	601.65	617.22
Residual returns to management and risk	-264.94	-279.96	-274.92

See footnotes at end of Table 55B.

Table 27A--Cow-calf production cash costs and returns, all sizes of operation,  
West, 1988-90

Item	1988	1989	1990
<u>Dollars per cow</u>			
Cash receipts:			
Steer calves (1.021 cwt) 1/	95.24	99.49	104.93
Heifer calves (0.704 cwt)	60.73	61.80	64.77
Yearling steers (1.335 cwt)	108.06	111.32	117.20
Yearling heifers (0.902 cwt)	70.71	73.15	77.06
Cull cows (0.925 cwt)	40.26	41.38	46.10
Total	375.00	387.14	410.06
Cash expenses:			
Feed--			
Grain (1.77 cwt)	8.62	9.53	8.96
Silage (0.09 ton)	1.97	1.46	1.55
Protein supplements (1.03 cwt)	13.11	13.85	13.14
Salt and minerals (0.36 cwt)	2.02	2.11	2.14
Hay (1.36 ton)	41.55	37.00	39.62
Pasture	36.91	38.89	37.09
Public grazing	1.60	1.71	1.74
Total feed costs	105.78	104.55	104.24
Other--			
Veterinary and medicine	7.55	8.13	8.48
Livestock hauling	2.87	3.06	3.20
Marketing	4.45	4.69	4.86
Fuel, lube, electricity	11.89	13.59	16.53
Machinery and building repairs	21.60	22.40	22.83
Hired labor (5.06 hrs)	24.45	25.51	27.28
Total, variable cash expenses	178.59	181.93	187.42
General farm overhead	26.49	27.88	28.81
Taxes and insurance	26.71	28.14	29.50
Interest	52.81	50.80	50.30
Total, fixed cash expenses	106.01	106.82	108.61
Total, cash expenses	284.60	288.75	296.03
Cash receipts less cash expenses	90.40	98.39	114.03
Capital replacement 2/	58.69	59.67	61.62
Total, cash expenses and replacement	343.29	348.42	357.65
Net cash returns	31.71	38.72	52.41

Table 27B--Cow-calf production economic costs and returns, all sizes of operation,  
West, 1988-90

Item	1988	1989	1990
<u>Dollars per cow</u>			
Total, cash receipts	375.00	387.14	410.06
Economic (full ownership) costs:			
Variable cash expenses	178.59	181.93	187.42
General farm overhead	26.49	27.88	28.81
Taxes and insurance	26.71	28.14	29.50
Capital replacement	58.69	59.67	61.62
Operating capital 3/	6.18	7.31	7.00
Other nonland capital 4/	26.75	28.89	32.76
Land 5/	54.21	59.88	66.46
Unpaid labor (25.8 hrs)	83.41	88.99	93.13
Total, economic costs	461.03	482.69	506.70
Residual returns to management and risk	-86.03	-95.55	-96.64

See footnotes at end of Table 55B.

Table 28A--U.S. farrow-to-finish production cash costs and returns, all sizes of operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Slaughter hogs (94.4 lbs) 1/	40.70	41.31	51.09
Cull sows (5.6 lbs)	1.79	1.95	2.57
Total	42.49	43.26	53.66
Cash expenses:			
Feed--			
Grain (348.2 lbs)	14.09	15.15	14.98
Protein supplements (81.2 lbs)	12.87	12.91	11.22
Pasture	.04	.03	.03
Total feed costs	27.00	28.09	26.23
Other--			
Veterinary and medicine	.57	.61	.64
Livestock hauling	.13	.13	.14
Marketing	.38	.40	.41
Bedding (12 lbs)	.15	.16	.17
Custom feed mixing	.00	.00	.00
Fuel, lube, and electricity	1.66	1.96	2.23
Machinery and building repairs	2.41	2.50	2.58
Hired labor (0.19 hr)	1.37	1.47	1.46
Manure credit	-.19	-.20	-.19
Total, variable cash expenses	33.48	35.12	33.67
General farm overhead	1.96	2.06	2.13
Taxes and insurance	.73	.74	.76
Interest	4.99	4.80	4.75
Total, fixed cash expenses	7.68	7.60	7.64
Total, cash expenses	41.16	42.72	41.31
Cash receipts less cash expenses	1.33	.54	12.35
Capital replacement 2/	5.55	5.74	6.03
Total, cash expenses and replacement	46.71	48.46	47.34
Net cash returns	-4.22	-5.20	6.32

Table 28B--U.S. farrow-to-finish production economic costs and returns, all sizes of operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	42.49	43.26	53.66
Economic (full ownership) costs:			
Variable cash expenses	33.48	35.12	33.67
General farm overhead	1.96	2.06	2.13
Taxes and insurance	.73	.74	.76
Capital replacement	5.55	5.74	6.03
Operating capital 3/	.58	.71	.63
Other nonland capital 4/	1.29	1.41	1.58
Land 5/	.07	.09	.08
Unpaid labor (0.91 hr)	4.64	5.05	4.95
Total, economic costs	48.30	50.92	49.83
Residual returns to management and risk	-5.81	-7.66	3.83

See footnotes at end of Table 55B.



Table 29A--U.S. farrow-to-finish production cash costs and returns, 140-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Slaughter hogs (94.7 lbs) 1/	40.57	41.21	50.98
Cull sows (5.3 lbs)	1.68	1.82	2.40
Total	42.25	43.03	53.38
Cash expenses:			
Feed--			
Grain (354.5 lbs)	14.65	15.83	15.67
Protein supplements (80.4 lbs)	13.82	13.80	11.93
Pasture	.19	.16	.16
Total feed costs	28.66	29.79	27.76
Other--			
Veterinary and medicine	.63	.68	.71
Livestock hauling	.15	.15	.16
Marketing	.60	.65	.67
Bedding (16 lbs)	.19	.20	.21
Custom feed mixing	.00	.00	.00
Fuel, lube, and electricity	1.85	2.23	2.57
Machinery and building repairs	2.86	2.96	3.14
Hired labor (0.12 hr)	.56	.63	.65
Manure credit	-.15	-.15	-.14
Total, variable cash expenses	35.35	37.14	35.73
General farm overhead	1.96	2.07	2.14
Taxes and insurance	.91	.92	.94
Interest	5.00	4.81	4.76
Total, fixed cash expenses	7.87	7.80	7.84
Total, cash expenses	43.22	44.94	43.57
Cash receipts less cash expenses	-.97	-1.91	9.81
Capital replacement 2/	6.88	7.04	7.43
Value of production less cash expenses	50.10	51.98	51.00
Net cash returns	-7.85	-8.95	2.38

Table 29B--U.S. farrow-to-finish production economic costs and returns, 140-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	42.25	43.03	53.38
Economic (full ownership) costs:			
Variable cash expenses	35.35	37.14	35.73
General farm overhead	1.96	2.07	2.14
Taxes and insurance	.91	.92	.94
Capital replacement	6.88	7.04	7.43
Operating capital 3/	.61	.75	.67
Other nonland capital 4/	1.60	1.74	1.98
Land 5/	.34	.41	.41
Unpaid labor (2.23 hrs)	10.17	10.91	10.74
Total, economic costs	57.82	60.98	60.04
Residual returns to management and risk	-15.57	-17.95	-6.66

See footnotes at end of Table 55B.

Table 30A--U.S. farrow-to-finish production cash costs and returns, 300-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Slaughter hogs (94 lbs) 1/	40.73	41.34	51.13
Cull sows (6 lbs)	1.91	2.07	2.73
Total	42.64	43.41	53.86
Cash expenses:			
Feed--			
Grain (353.7 lbs)	14.22	15.31	15.14
Protein supplements (80.4 lbs)	13.83	13.81	11.94
Pasture	.09	.08	.07
Total feed costs	28.14	29.20	27.15
Other--			
Veterinary and medicine	.73	.78	.82
Livestock hauling	.21	.21	.22
Marketing	.45	.48	.50
Bedding (22 lbs)	.24	.26	.27
Custom feed mixing	.00	.00	.00
Fuel, lube, and electricity	1.49	1.86	2.12
Machinery and building repairs	2.58	2.66	2.75
Hired labor (0.09 hr)	.44	.47	.46
Manure credit	-.17	-.18	-.17
Total, variable cash expenses	34.11	35.74	34.12
General farm overhead	1.98	2.08	2.15
Taxes and insurance	.78	.79	.81
Interest	5.04	4.85	4.80
Total, fixed cash expenses	7.80	7.72	7.76
Total, cash expenses	41.91	43.46	41.88
Cash receipts less cash expenses	.73	-.05	11.98
Capital replacement 2/	6.65	6.83	7.16
Total, cash expenses and replacement	48.56	50.29	49.04
Net cash returns	-5.92	-6.88	4.82

Table 30B--U.S. farrow-to-finish production economic costs and returns, 300-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	42.64	43.41	53.86
Economic (full ownership) costs:			
Variable cash expenses	34.11	35.74	34.12
General farm overhead	1.98	2.08	2.15
Taxes and insurance	.78	.79	.81
Capital replacement	6.65	6.83	7.16
Operating capital 3/	.59	.72	.64
Other nonland capital 4/	1.48	1.61	1.80
Land 5/	.16	.20	.19
Unpaid labor (1.58 hrs)	7.19	7.82	7.68
Total, economic costs	52.94	55.79	54.55
Residual returns to management and risk	-10.30	-12.38	-.69

See footnotes at end of Table 55B.

Table 31A--U.S. farrow-to-finish production cash costs and returns, 650-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Slaughter hogs (94.2 lbs) 1/	40.61	41.21	50.97
Cull sows (5.8 lbs)	1.85	2.02	2.66
Total	42.46	43.23	53.63
Cash expenses:			
Feed--			
Grain (353.2 lbs)	14.15	15.19	15.01
Protein supplements (80.7 lbs)	13.72	13.72	11.86
Pasture	.06	.05	.04
Total feed costs	27.93	28.96	26.91
Other--			
Veterinary and medicine	.80	.86	.89
Livestock hauling	.13	.14	.15
Marketing	.44	.46	.48
Bedding (18 lbs)	.21	.23	.24
Custom feed mixing	.00	.00	.00
Fuel, lube, and electricity	1.77	2.15	2.45
Machinery and building repairs	2.45	2.54	2.61
Hired labor (0.12 hr)	.57	.62	.62
Manure credit	-.18	-.19	-.18
Total, variable cash expenses	34.12	35.77	34.17
General farm overhead	1.95	2.05	2.12
Taxes and insurance	.72	.72	.74
Interest	4.96	4.78	4.73
Total, fixed cash expenses	7.63	7.55	7.59
Total, cash expenses	41.75	43.32	41.76
Cash receipts less cash expenses	.71	-.09	11.87
Capital replacement 2/	5.83	6.05	6.34
Total, cash expenses and replacement	47.58	49.37	48.10
Net cash returns	-5.12	-6.14	5.53

Table 31B--U.S. farrow-to-finish production economic costs and returns, 650-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	42.46	43.23	53.63
Economic (full ownership) costs:			
Variable cash expenses	34.12	35.77	34.17
General farm overhead	1.95	2.05	2.12
Taxes and insurance	.72	.72	.74
Capital replacement	5.83	6.05	6.34
Operating capital 3/	.59	.72	.64
Other nonland capital 4/	1.29	1.41	1.58
Land 5/	.10	.12	.11
Unpaid labor (1.02 hrs)	4.60	5.01	4.92
Total, economic costs	49.20	51.85	50.62
Residual returns to management and risk	-6.74	-8.62	3.01

See footnotes at end of Table 55B.



Table 32A--U.S. farrow-to-finish production cash costs and returns, 1,600-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Slaughter hogs (94.4 lbs) 1/	40.69	41.30	51.07
Cull sows (5.6 lbs)	1.80	1.96	2.58
Total	42.49	43.26	53.65
Cash expenses:			
Feed--			
Grain (345.8 lbs)	13.89	14.91	14.74
Protein supplements (85 lbs)	14.01	14.02	11.99
Pasture	.01	.00	.01
Total feed costs	27.91	28.93	26.74
Other--			
Veterinary and medicine	.32	.35	.37
Livestock hauling	.11	.12	.13
Marketing	.41	.43	.44
Bedding (12 lbs)	.16	.17	.18
Custom feed mixing	0	0	0
Fuel, lube, and electricity	1.50	1.79	2.04
Machinery and building repairs	2.49	2.57	2.64
Hired labor (0.23 hr)	1.46	1.59	1.58
Manure credit	-.18	-.18	-.17
Total, variable cash expenses	34.18	35.77	33.95
General farm overhead	1.95	2.05	2.12
Taxes and insurance	.80	.81	.84
Interest	4.96	4.78	4.73
Total, fixed cash expenses	7.71	7.64	7.69
Total, cash expenses	41.89	43.41	41.64
Cash receipts less cash expenses	.60	-.15	12.01
Capital replacement 2/	5.68	5.86	6.14
Total, cash expenses and replacement	47.57	49.27	47.78
Net cash returns	-5.08	-6.01	5.87

Table 32B--U.S. farrow-to-finish production economic costs and returns, 1,600-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	42.49	43.26	53.65
Economic (full ownership) costs:			
Variable cash expenses	34.18	35.77	33.95
General farm overhead	1.95	2.05	2.12
Taxes and insurance	.80	.81	.84
Capital replacement	5.68	5.86	6.14
Operating capital 3/	.59	.72	.63
Other nonland capital 4/	1.38	1.50	1.68
Land 5/	.01	.02	.02
Unpaid labor (0.74 hr)	4.54	4.94	4.85
Total, economic costs	49.13	51.67	50.23
Residual returns to management and risk	-6.64	-8.41	3.42

See footnotes at end of Table 55B.

Table 33A--U.S. farrow-to-finish production cash costs and returns, 3,000-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Slaughter hogs (94.6 lbs) 1/	40.78	41.39	51.19
Cull sows (5.4 lbs)	1.72	1.87	2.47
Total	42.50	43.26	53.66
Cash expenses:			
Feed--			
Grain (348.1 lbs)	14.16	15.21	15.04
Protein supplements (79.9 lbs)	11.18	11.31	10.09
Pasture	0	0	0
Total feed costs	25.34	26.52	25.13
Other--			
Veterinary and medicine	.40	.43	.45
Livestock hauling	.07	.07	.08
Marketing	.24	.26	.26
Bedding (4 lbs)	.05	.05	.06
Custom feed mixing	0	0	0
Fuel, lube, and electricity	1.61	1.84	2.10
Machinery and building repairs	2.40	2.49	2.57
Hired labor (0.23 hr)	1.95	2.12	2.16
Manure credit	-.16	-.17	-.16
Total, variable cash expenses	31.90	33.61	32.65
General farm overhead	1.95	2.06	2.12
Taxes and insurance	.66	.67	.70
Interest	4.97	4.78	4.73
Total, fixed cash expenses	7.58	7.51	7.55
Total, cash expenses	39.48	41.12	40.20
Cash receipts less cash expenses	3.02	2.14	13.46
Capital replacement 2/	4.86	5.04	5.32
Total, cash expenses and replacement	44.34	46.16	45.52
Net cash returns	-1.84	-2.90	8.14

Table 33B--U.S. farrow-to-finish production economic costs and returns, 3,000-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	42.50	43.26	53.66
Economic (full ownership) costs:			
Variable cash expenses	31.90	33.61	32.65
General farm overhead	1.95	2.06	2.12
Taxes and insurance	.66	.67	.70
Capital replacement	4.86	5.04	5.32
Operating capital 3/	.55	.68	.61
Other nonland capital 4/	1.15	1.26	1.42
Land 5/	.01	.01	.01
Unpaid labor (0.43 hr)	3.69	4.01	3.94
Total, economic costs	44.77	47.34	46.77
Residual returns to management and risk	-2.27	-4.08	6.89

See footnotes at end of Table 55B.

Table 34A--U.S. farrow-to-finish production cash costs and returns, 10,000-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Slaughter hogs (94.7 lbs) 1/	40.78	41.39	51.20
Cull sows (5.3 lbs)	1.71	1.85	2.44
Total	42.49	43.24	53.64
Cash expenses:			
Feed--			
Grain (336.5 lbs)	13.90	14.93	14.78
Protein supplements (77.8 lbs)	10.46	10.58	9.42
Pasture	0	0	0
Total feed costs	24.36	25.51	24.20
Other--			
Veterinary and medicine	.69	.75	.79
Livestock hauling	.13	.14	.15
Marketing	.24	.26	.27
Bedding (2 lbs)	.04	.04	.04
Custom feed mixing	0	0	0
Fuel, lube, and electricity	1.90	2.12	2.40
Machinery and building repairs	1.87	1.93	2.00
Hired labor (0.33 hr)	2.92	3.15	3.02
Manure credit	-.32	-.33	-.31
Total, variable cash expenses	31.83	33.57	32.56
General farm overhead	1.95	2.06	2.13
Taxes and insurance	.59	.60	.63
Interest	4.97	4.78	4.73
Total, fixed cash expenses	7.51	7.44	7.49
Total, cash expenses	39.34	41.01	40.05
Cash receipts less cash expenses	3.15	2.23	13.59
Capital replacement 2/	4.15	4.30	4.58
Total, cash expenses and replacement	43.49	45.31	44.63
Net cash returns	-1.00	-2.07	9.01

Table 34B--U.S. farrow-to-finish production economic costs and returns, 10,000-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	42.49	43.24	53.64
Economic (full ownership) costs:			
Variable cash expenses	31.83	33.57	32.56
General farm overhead	1.95	2.06	2.13
Taxes and insurance	.59	.60	.63
Capital replacement	4.15	4.30	4.58
Operating capital 3/	.55	.68	.61
Other nonland capital 4/	1.00	1.09	1.24
Land 5/	.00	.01	.00
Unpaid labor (0.13 hr)	1.12	1.21	1.18
Total, economic costs	41.19	43.52	42.93
Residual returns to management and risk	1.30	-0.28	10.71

See footnotes at end of Table 55B.



Table 35A--Farrow-to-finish production cash costs and returns, all sizes of operation, North-Central, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Gross value of production:			
Slaughter hogs (94.2 lbs) 1/	40.62	41.22	50.98
Cull sows (5.8 lbs)	1.87	2.04	2.70
Total	42.49	43.26	53.68
Cash expenses:			
Feed--			
Grain (348.5 lbs)	13.75	14.75	14.57
Protein supplements (80.8 lbs)	12.74	12.78	11.13
Pasture	.03	.02	.02
Total feed costs	26.52	27.55	25.72
Other--			
Veterinary and medicine	.55	.60	.62
Livestock hauling	.14	.15	.15
Marketing	.38	.40	.41
Bedding (14 lbs)	.16	.18	.19
Custom feed mixing	0	0	0
Fuel, lube, and electricity	1.62	1.93	2.18
Machinery and building repairs	2.46	2.55	2.60
Hired labor (0.18 hr)	1.28	1.38	1.35
Manure credit	-.22	-.23	-.22
Total, variable cash expenses	32.89	34.51	33.00
General farm overhead	1.96	2.06	2.13
Taxes and insurance	.74	.74	.76
Interest	4.98	4.79	4.74
Total, fixed cash expenses	7.68	7.59	7.63
Total, cash expenses	40.57	42.10	40.63
Cash receipts less cash expenses	1.92	1.16	13.05
Capital replacement 2/	5.69	5.89	6.15
Total, cash expenses and replacement	46.26	47.99	46.78
Net cash returns	-3.77	-4.73	6.90

Table 35B--Farrow-to-finish production economic costs and returns, all sizes of operation, North-Central, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	42.49	43.26	53.68
Economic (full ownership) costs:			
Variable cash expenses	32.89	34.51	33.00
General farm overhead	1.96	2.06	2.13
Taxes and insurance	.74	.74	.76
Capital replacement	5.69	5.89	6.15
Operating capital 3/	.57	.69	.62
Other nonland capital 4/	1.32	1.44	1.60
Land 5/	.06	.07	.07
Unpaid labor (0.92 hr)	4.72	5.16	5.04
Total, economic costs	47.95	50.56	49.37
Residual returns to management and risk	-5.46	-7.30	4.31

See footnotes at end Table 55B.

Table 36A--Farrow-to-finish production cash costs and returns, all sizes of operation, Southeast, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Slaughter hogs (95.9 lbs) 1/	41.23	41.84	51.74
Cull sows (4.1 lbs)	1.26	1.37	1.82
Total	42.49	43.21	53.56
Cash expenses:			
Feed--			
Grain (346 lbs)	16.31	17.50	17.26
Protein supplements (83.6 lbs)	13.71	13.73	11.77
Pasture	.11	.09	.09
Total feed costs	30.13	31.32	29.12
Other--			
Veterinary and medicine	.66	.70	.73
Livestock hauling	.06	.06	.07
Marketing	.39	.41	.43
Bedding (4 lbs)	.05	.05	.05
Custom feed mixing	0	0	0
Fuel, lube, and electricity	1.95	2.17	2.52
Machinery and building repairs	2.09	2.18	2.24
Hired labor (0.3 hr)	1.94	2.02	2.08
Manure credit	0	0	0
Total, variable cash expenses	37.27	38.91	37.24
General farm overhead	1.98	2.08	2.15
Taxes and insurance	.71	.72	.77
Interest	5.03	4.84	4.79
Total, fixed cash expenses	7.72	7.64	7.71
Total, cash expenses	44.99	46.55	44.95
Cash receipts less cash expenses	-2.50	-3.34	8.61
Capital replacement 2/	4.66	4.84	5.42
Total, cash expenses and replacement	49.65	51.39	50.37
Net cash returns	-7.16	-8.18	3.19

Table 36B--Farrow-to-finish production economic costs and returns, all sizes of operation, Southeast, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	42.49	43.21	53.56
Economic (full ownership) costs:			
Variable cash expenses	37.27	38.91	37.24
General farm overhead	1.98	2.08	2.15
Taxes and insurance	.71	.72	.77
Capital replacement	4.66	4.84	5.42
Operating capital 3/	.64	.78	.70
Other nonland capital 4/	1.11	1.22	1.46
Land 5/	.16	.18	.18
Unpaid labor (0.84 hr)	4.13	4.35	4.46
Total, economic costs	50.66	53.08	52.38
Residual returns to management and risk	-8.17	-9.87	1.18

See footnotes at end of Table 55B.

Table 37A--U.S. feeder pig production cash costs and returns, all sizes of operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Feeder pigs (81.1 lbs) 1/	60.63	56.90	87.19
Cull sows (18.9 lbs)	6.08	6.58	8.68
Total	66.71	63.48	95.87
Cash expenses:			
Feed--			
Grain (427.7 lbs)	17.46	18.75	18.51
Protein supplements (117.2 lbs)	20.63	20.65	17.81
Pasture	.17	.15	.14
Total feed costs	38.26	39.55	36.46
Other--			
Veterinary and medicine	1.50	1.62	1.69
Livestock hauling	.19	.21	.21
Marketing	1.76	1.89	1.96
Bedding (32 lbs)	.37	.41	.42
Custom feed mixing	1.18	1.23	1.30
Fuel, lube, and electricity	6.33	7.35	8.32
Machinery and building repairs	4.85	5.06	5.29
Hired labor (0.44 hr)	3.38	3.59	3.65
Manure credit	-.15	-.15	-.14
Total, variable cash expenses	57.67	60.76	59.16
General farm overhead	2.76	2.90	3.00
Taxes and insurance	1.82	1.87	1.94
Interest	7.35	7.07	7.00
Total, fixed cash expenses	11.93	11.84	11.94
Total, cash expenses	69.60	72.60	71.10
Cash receipts less cash expenses	-2.89	-9.12	24.77
Capital replacement 2/	11.50	12.00	12.82
Total, cash expenses and replacement	81.10	84.60	83.92
Net cash receipts	-14.39	-21.12	11.95

Table 37B--U.S. feeder pig production economic costs and returns, all sizes of operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	66.71	63.48	95.87
Economic (full ownership) costs:			
Variable cash expenses	57.67	60.76	59.16
General farm overhead	2.76	2.90	3.00
Taxes and insurance	1.82	1.87	1.94
Capital replacement	11.50	12.00	12.82
Operating capital 3/	1.00	1.22	1.11
Other nonland capital 4/	2.89	3.19	3.68
Land 5/	.36	.44	.43
Unpaid labor (3.47 hrs)	17.76	19.34	19.08
Total, economic costs	95.76	101.72	101.22
Residual returns to management and risk	-29.05	-38.24	-5.35

See footnotes at end of Table 55B.



Table 38A--U.S. feeder pig production cash costs and returns, 140-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
<b>Cash receipts:</b>			
Feeder pigs (80.4 lbs) 1/	58.33	55.19	84.77
Cull sows (19.6 lbs)	6.28	6.66	8.74
Total	64.61	61.85	93.51
<b>Cash expenses:</b>			
Feed--			
Grain (469 lbs)	19.65	21.15	20.90
Protein supplements (119.7 lbs)	20.57	20.42	17.61
Pasture	.67	.62	.64
Total feed costs	40.89	42.19	39.15
Other--			
Veterinary and medicine	3.03	3.18	3.29
Livestock hauling	.00	.00	.00
Marketing	1.87	2.09	2.20
Bedding (32 lbs)	.38	.42	.45
Custom feed mixing	5.94	6.55	6.89
Fuel, lube, and electricity	5.85	7.34	8.43
Machinery and building repairs	6.08	6.35	6.76
Hired labor (0.13 hr)	.58	.69	.74
Manure credit	0	0	0
Total, variable cash expenses	64.62	68.81	67.91
General farm overhead	2.63	2.77	2.87
Taxes and insurance	1.98	1.99	2.06
Interest	7.02	6.75	6.68
Total, fixed cash expenses	11.63	11.51	11.61
Total, cash expenses	76.25	80.32	79.52
Cash receipts less cash expenses	-11.64	-18.47	13.99
Capital replacement 2/	13.09	13.66	14.72
Total, cash expenses and replacement	89.34	93.98	94.24
Net cash receipts	-24.73	-32.13	-7.3

Table 38B--U.S. feeder pig production economic costs and returns, 140-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	64.61	61.85	93.51
<b>Economic (full ownership) costs:</b>			
Variable cash expenses	64.62	68.81	67.91
General farm overhead	2.63	2.77	2.87
Taxes and insurance	1.98	1.99	2.06
Capital replacement	13.09	13.66	14.72
Operating capital 3/	1.12	1.38	1.27
Other nonland capital 4/	3.27	3.63	4.21
Land 5/	.70	.88	.88
Unpaid labor (7.64 hrs)	35.47	38.35	38.47
Total, economic costs	122.88	131.47	132.39
Residual returns to management and risk	-58.27	-69.62	-38.88

See footnotes at end of Table 55B.

Table 39A--U.S. feeder pig production cash costs and returns, 300-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Feeder pigs (79.4 lbs) 1/	59.43	55.84	85.55
Cull sows (20.6 lbs)	6.61	7.11	9.38
Total	66.04	62.95	94.93
Cash expenses:			
Feed--			
Grain (469.5 lbs)	18.98	20.36	20.10
Protein supplements (119.4 lbs)	20.55	20.41	17.61
Pasture	.42	.35	.32
Total feed costs	39.95	41.12	38.03
Other--			
Veterinary and medicine	3.79	3.98	4.13
Livestock hauling	.40	.41	.42
Marketing	1.90	2.05	2.14
Bedding (76 lbs)	.84	.88	.92
Custom feed mixing	2.68	2.79	2.87
Fuel, lube, and electricity	10.29	11.66	13.14
Machinery and building repairs	6.13	6.41	6.72
Hired labor (0.1 hr)	.45	.56	.62
Manure credit	-.16	-.17	-.16
Total, variable cash expenses	66.27	69.69	68.83
General farm overhead	2.81	2.96	3.06
Taxes and insurance	2.56	2.66	2.68
Interest	7.49	7.21	7.13
Total, fixed cash expenses	12.86	12.83	12.87
Total, cash expenses	79.13	82.52	81.70
Cash receipts less cash expenses	-13.09	-19.57	13.23
Capital replacement 2/	13.96	14.57	15.50
Total, cash expenses and replacement	93.09	97.09	97.20
Net cash receipts	-27.05	-34.14	-2.27

Table 39B--U.S. feeder pig production economic costs and returns, 300-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	66.04	62.95	94.93
Economic (full ownership) costs:			
Variable cash expenses	66.27	69.69	68.83
General farm overhead	2.81	2.96	3.06
Taxes and insurance	2.56	2.66	2.68
Capital replacement	13.96	14.57	15.50
Operating capital 3/	1.15	1.40	1.29
Other nonland capital 4/	3.61	3.98	4.56
Land 5/	1.40	1.62	1.53
Unpaid labor (5.72 hrs)	26.05	28.41	28.11
Total, economic costs	117.81	125.29	125.56
Residual returns to management and risk	-51.77	-62.34	-30.63

See footnotes at end of Table 55B.

Table 40A--U.S. feeder pig production cash costs and returns, 650-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Feeder pigs (80.5 lbs) 1/	60.29	56.53	86.57
Cull sows (19.5 lbs)	6.28	6.82	9.01
Total	66.57	63.35	95.58
Cash expenses:			
Feed--			
Grain (439.5 lbs)	17.68	18.96	18.71
Protein supplements (123 lbs)	22.74	22.78	19.68
Pasture	.18	.15	.15
Total feed costs	40.60	41.89	38.54
Other--			
Veterinary and medicine	.44	.47	.49
Livestock hauling	.25	.26	.27
Marketing	3.28	3.45	3.57
Bedding (42 lbs)	.49	.52	.55
Custom feed mixing	.00	.00	.00
Fuel, lube, and electricity	5.51	6.31	7.18
Machinery and building repairs	5.11	5.31	5.56
Hired labor (0.2 hr)	.93	1.02	1.01
Manure credit	-.17	-.18	-.17
Total, variable cash expenses	56.44	59.05	57.00
General farm overhead	2.80	2.94	3.04
Taxes and insurance	1.75	1.79	1.86
Interest	7.45	7.17	7.10
Total, fixed cash expenses	12.00	11.90	12.00
Total, cash expenses	68.44	70.95	69.00
Cash receipts less cash expenses	-1.87	-7.60	26.58
Capital replacement 2/	11.11	11.54	12.35
Total, cash expenses and replacement	79.55	82.49	81.35
Net cash receipts	-12.98	-19.14	14.23

Table 40B--U.S. feeder pig production economic costs and returns, 650-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	66.57	63.35	95.58
Economic (full ownership) costs:			
Variable cash expenses	56.44	59.05	57.00
General farm overhead	2.80	2.94	3.04
Taxes and insurance	1.75	1.79	1.86
Capital replacement	11.11	11.54	12.35
Operating capital 3/	.98	1.19	1.06
Other nonland capital 4/	2.81	3.09	3.57
Land 5/	.38	.45	.43
Unpaid labor (4.44 hrs)	20.52	22.33	21.97
Total, economic costs	96.79	102.38	101.28
Residual returns to management and risk	-30.22	-39.03	-5.70

See footnotes at end Table 55B.



Table 41A--U.S. feeder pig production cash costs and returns, 1,600-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Feeder pigs (80.5 lbs) 1/	60.36	56.60	86.71
Cull sows (19.5 lbs)	6.28	6.81	8.99
Total	66.64	63.41	95.70
Cash expenses:			
Feed--			
Grain (434.7 lbs)	17.55	18.81	18.57
Protein supplements (121.5 lbs)	22.14	22.17	19.09
Pasture	.07	.06	.06
Total feed costs	39.76	41.04	37.72
Other--			
Veterinary and medicine	.75	.80	.83
Livestock hauling	.20	.21	.22
Marketing	1.44	1.52	1.59
Bedding (16 lbs)	.19	.20	.21
Custom feed mixing	.00	.00	.00
Fuel, lube, and electricity	7.02	8.07	9.15
Machinery and building repairs	5.52	5.71	5.94
Hired labor (0.18 hr)	1.08	1.18	1.27
Manure credit	-.17	-.17	-.16
Total, variable cash expenses	55.79	58.56	56.77
General farm overhead	2.78	2.93	3.03
Taxes and insurance	2.11	2.13	2.21
Interest	7.41	7.13	7.06
Total, fixed cash expenses	12.30	12.19	12.30
Total, cash expenses	68.09	70.75	69.07
Cash receipts less cash expenses	-1.45	-7.34	26.63
Capital replacement 2/	13.25	13.73	14.47
Total, cash expenses and replacement	81.34	84.48	83.54
Net cash receipts	-14.70	-21.07	12.16

Table 41B--U.S. feeder pig production economic costs and returns, 1,600-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	66.64	63.41	95.70
Economic (full ownership) costs:			
Variable cash expenses	55.79	58.56	56.77
General farm overhead	2.78	2.93	3.03
Taxes and insurance	2.11	2.13	2.21
Capital replacement	13.25	13.73	14.47
Operating capital 3/	.96	1.18	1.06
Other nonland capital 4/	3.31	3.63	4.14
Land 5/	.13	.15	.15
Unpaid labor (3.06 hrs)	19.40	21.07	20.72
Total, economic costs	97.73	103.38	102.55
Residual returns to management and risk	-31.09	-39.97	-6.85

See footnotes at end of Table 55B.

Table 42A--U.S. feeder pig production cash costs and returns, 3,000-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Feeder pigs (81.8 lbs) 1/	61.37	57.56	88.20
Cull sows (18.2 lbs)	5.83	6.32	8.32
Total	67.20	63.88	96.52
Cash expenses:			
Feed--			
Grain (410 lbs)	16.86	18.09	17.87
Protein supplements (114.6 lbs)	20.17	20.23	17.48
Pasture	.06	.05	.05
Total feed costs	37.09	38.37	35.40
Other--			
Veterinary and medicine	1.02	1.10	1.15
Livestock hauling	.11	.12	.12
Marketing	1.34	1.41	1.46
Bedding (36 lbs)	.44	.47	.48
Custom feed mixing	.00	.00	.00
Fuel, lube, and electricity	5.18	5.89	6.69
Machinery and building repairs	4.22	4.37	4.56
Hired labor (0.56 hr)	4.75	5.13	5.23
Manure credit	-.15	-.15	-.14
Total, variable cash expenses	54.00	56.71	54.95
General farm overhead	2.75	2.89	2.99
Taxes and insurance	1.54	1.57	1.65
Interest	7.33	7.05	6.98
Total, fixed cash expenses	11.62	11.51	11.62
Total, cash expenses	65.62	68.22	66.57
Cash receipts less cash expenses	1.58	-4.34	29.95
Capital replacement 2/	10.45	10.86	11.69
Total, cash expenses and replacement	76.07	79.08	78.26
Net cash receipts	-8.87	-15.20	18.26

Table 42B--U.S. feeder pig production economic costs and returns, 3,000-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	67.20	63.88	96.52
Economic (full ownership) costs:			
Variable cash expenses	54.00	56.71	54.95
General farm overhead	2.75	2.89	2.99
Taxes and insurance	1.54	1.57	1.65
Capital replacement	10.45	10.86	11.69
Operating capital 3/	.93	1.14	1.03
Other nonland capital 4/	2.56	2.81	3.25
Land 5/	.08	.10	.09
Unpaid labor (1.69 hrs)	13.58	14.66	14.43
Total, economic costs	85.89	90.74	90.08
Residual returns to management and risk	-18.69	-26.86	6.44

See footnotes at end of Table 55B.

Table 43A--U.S. feeder pig production cash costs and returns, 10,000-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Feeder pigs (83.7 lbs) 1/	62.75	58.86	90.20
Cull sows (16.3 lbs)	5.22	5.65	7.43
Total	67.97	64.51	97.63
Cash expenses:			
Feed--			
Grain (367.4 lbs)	15.42	16.56	16.37
Protein supplements (102.6 lbs)	15.86	15.91	13.77
Pasture	0	0	0
Total feed costs	31.28	32.47	30.14
Other--			
Veterinary and medicine	2.17	2.33	2.44
Livestock hauling	.13	.14	.14
Marketing	.54	.59	.63
Bedding	0	0	0
Custom feed mixing	2.67	2.89	3.04
Fuel, lube, and electricity	4.82	5.33	6.00
Machinery and building repairs	2.54	2.62	2.74
Hired labor (1.47 hrs)	12.67	13.60	13.49
Manure credit	-.13	-.13	-.12
Total, variable cash expenses	56.69	59.84	58.50
General farm overhead	2.71	2.86	2.95
Taxes and insurance	1.08	1.11	1.20
Interest	7.23	9.96	6.89
Total, fixed cash expenses	11.02	13.93	11.04
Total, cash expenses	67.71	73.77	69.54
Cash receipts less cash expenses	.26	-9.26	28.09
Capital replacement 2/	7.74	8.05	8.86
Total, cash expenses and replacement	75.45	81.82	78.40
Net cash receipts	-7.48	-17.31	19.23

Table 43B--U.S. feeder pig production economic costs and returns, 10,000-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	67.97	64.51	97.63
Economic (full ownership) costs:			
Variable cash expenses	56.69	59.84	58.50
General farm overhead	2.71	2.86	2.95
Taxes and insurance	1.08	1.11	1.20
Capital replacement	7.74	8.05	8.86
Operating capital 3/	.98	1.20	1.09
Other nonland capital 4/	1.97	2.16	2.54
Land 5/	.01	.01	.01
Unpaid labor (0.1 hr)	.88	.95	.99
Total, economic costs	72.06	76.18	76.14
Residual returns to management and risk	-4.09	-11.67	21.49

See footnotes at end of Table 55B.



Table 44A--Feeder pig production cash costs and returns, all sizes of operation,  
North-Central, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Feeder pigs (79.7 lbs) 1/	59.52	55.81	85.41
Cull sows (20.3 lbs)	6.56	7.15	9.47
Total	66.08	62.96	94.88
Cash expenses:			
Feed--			
Grain (439.8 lbs)	17.36	18.63	18.40
Protein supplements (120.6 lbs)	21.10	21.15	18.27
Pasture	.07	.06	.05
Total feed costs	38.53	39.84	36.72
Other--			
Veterinary and medicine	1.55	1.70	1.78
Livestock hauling	.24	.26	.27
Marketing	1.68	1.79	1.85
Bedding (3 lbs)	.42	.47	.50
Custom feed mixing	1.01	1.07	1.11
Fuel, lube, and electricity	6.54	7.69	8.71
Machinery and building repairs	4.80	4.98	5.09
Hired labor (0.3 hr)	2.45	2.61	2.55
Manure credit	-.18	-.19	-.18
Total, variable cash expenses	57.04	60.22	58.40
General farm overhead	2.85	3.00	3.10
Taxes and insurance	1.84	1.90	1.95
Interest	7.59	7.30	7.23
Total, fixed cash expenses	12.28	12.20	12.28
Total, cash expenses	69.32	72.42	70.68
Cash receipts less cash expenses	-3.24	-9.46	24.20
Capital replacement 2/	11.53	12.01	12.67
Total, cash expenses and replacement	80.85	84.43	83.35
Net cash receipts	-14.77	-21.47	11.53

Table 44B--Feeder pig production economic costs and returns, all sizes of operation,  
North-Central, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	66.08	62.96	94.88
Economic (full ownership) costs:			
Variable cash expenses	57.04	60.22	58.40
General farm overhead	2.85	3.00	3.10
Taxes and insurance	1.84	1.90	1.95
Capital replacement	11.53	12.01	12.67
Operating capital 3/	.99	1.21	1.09
Other nonland capital 4/	2.90	3.19	3.64
Land 5/	.33	.43	.41
Unpaid labor (3.43 hrs)	17.84	19.59	19.14
Total, economic costs	95.32	101.55	100.40
Residual returns to management and risk	-29.24	-38.59	-5.52

See footnotes at end of Table 55B.

Table 45A--Feeder pig production cash costs and returns, all sizes of operation,  
Southeast, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Feeder pigs (86.7 lbs) 1/	65.11	60.96	93.30
Cull sows (13.3 lbs)	4.11	4.49	5.95
Total	69.22	65.45	99.25
Cash expenses:			
Feed--			
Grain (379.1 lbs)	17.87	19.19	18.91
Protein supplements (103.6 lbs)	18.73	18.79	16.24
Pasture	.56	.45	.45
Total feed costs	37.16	38.43	35.60
Other--			
Veterinary and medicine	1.27	1.34	1.40
Livestock hauling	.02	.02	.02
Marketing	2.09	2.24	2.32
Bedding (14 lbs)	.16	.17	.18
Custom feed mixing	1.89	1.85	1.93
Fuel, lube, and electricity	5.49	6.05	6.99
Machinery and building repairs	5.05	5.33	5.57
Hired labor (1 hr)	7.14	7.23	7.42
Manure credit	0	0	0
Total, variable cash expenses	60.27	62.66	61.43
General farm overhead	2.37	2.50	2.58
Taxes and insurance	1.71	1.77	1.88
Interest	6.32	6.08	6.02
Total, fixed cash expenses	10.40	10.35	10.48
Total, cash expenses	70.67	73.01	71.91
Cash receipts less cash expenses	-1.45	-7.56	27.34
Capital replacement 2/	11.38	11.97	13.32
Total, cash expenses and replacement	82.05	84.98	85.23
Net cash receipts	-12.83	-19.53	14.02

Table 45B--Feeder pig production economic costs and returns, all sizes of operation,  
Southeast, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	69.22	65.45	99.25
Economic (full ownership) costs:			
Variable cash expenses	60.27	62.66	61.43
General farm overhead	2.37	2.50	2.58
Taxes and insurance	1.71	1.77	1.88
Capital replacement	11.38	11.97	13.32
Operating capital 3/	1.04	1.26	1.15
Other nonland capital 4/	2.87	3.19	3.80
Land 5/	.45	.50	.49
Unpaid labor (3.68 hrs)	17.46	18.38	18.87
Total, economic costs	97.55	102.23	103.52
Residual returns to management and risk	-28.33	-36.78	-4.27

See footnotes at end of Table 55B.

Table 46A--U.S. feeder pig finishing production cash costs and returns, all sizes of operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Slaughter hogs (100 lbs) 1/	42.84	43.50	53.79
Total	42.84	43.50	53.79
Cash expenses:			
Feeders--			
Feeder pigs (22.7 lbs)	15.72	14.76	22.63
Feed--			
Grain (239.2 lbs)	9.72	10.44	10.33
Protein supplements (56.8 lbs)	7.34	7.34	6.34
Pasture	.01	.01	.01
Total feed costs	17.07	17.79	16.68
Other--			
Veterinary and medicine	.49	.52	.54
Livestock hauling	.16	.17	.18
Marketing	.45	.47	.49
Bedding (8 lbs)	.10	.10	.11
Custom feed mixing	.07	.07	.08
Fuel, lube, and electricity	.97	1.20	1.37
Machinery and building repairs	1.66	1.73	1.80
Hired labor (0.07 hr)	.46	.50	.49
Manure credit	-.15	-.15	-.14
Total, variable cash expenses	37.00	37.16	44.23
General farm overhead	1.92	2.02	2.08
Taxes and insurance	.48	.47	.48
Interest	4.86	4.68	4.63
Total, fixed cash expenses	7.26	7.17	7.19
Total, cash expenses	44.26	44.33	51.42
Cash receipts less cash expenses	-1.42	-.83	2.37
Capital replacement 2/	3.10	3.20	3.33
Total, cash expenses and replacement	47.36	47.53	54.75
Net cash returns	-4.52	-4.03	-.96

Table 46B--U.S. feeder pig finishing production economic costs and returns, all sizes of operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	42.84	43.50	53.79
Economic (full ownership) costs:			
Variable cash expenses	37.00	37.16	44.23
General farm overhead	1.92	2.02	2.08
Taxes and insurance	.48	.47	.48
Capital replacement	3.10	3.20	3.33
Operating capital 3/	.43	.50	.55
Other nonland capital 4/	.72	.79	.87
Land 5/	.02	.03	.03
Unpaid labor (0.29 hr)	1.42	1.54	1.52
Total, economic costs	45.09	45.71	53.09
Residual returns to management and risk	-2.25	-2.21	.70

See footnotes at end of Table 55B.



Table 47A--U.S. feeder pig finishing production cash costs and returns, 140-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Slaughter hogs (100 lbs) 1/	40.67	41.38	51.23
Total	40.67	41.38	51.23
Cash expenses:			
Feeders--			
Feeder pigs (23.3 lbs)	16.43	15.46	23.70
Feed--			
Grain (241.3 lbs)	10.04	10.85	10.74
Protein supplements (44.7 lbs)	7.67	7.66	6.62
Pasture	.14	.13	.14
Total feed costs	17.85	18.64	17.50
Other--			
Veterinary and medicine	.78	.83	.86
Livestock hauling	.08	.08	.08
Marketing	.77	.81	.83
Bedding (18 lbs)	.20	.21	.22
Custom feed mixing	.99	1.23	1.35
Fuel, lube, and electricity	1.26	1.51	1.75
Machinery and building repairs	1.95	2.02	2.13
Hired labor (0.04 hr)	.17	.18	.17
Manure credit	-.11	-.11	-.10
Total, variable cash expenses	40.37	40.86	48.49
General farm overhead	1.85	1.95	2.02
Taxes and insurance	.56	.57	.58
Interest	4.70	4.53	4.48
Total, fixed cash expenses	7.11	7.05	7.08
Total, cash expenses	47.48	47.91	55.57
Cash receipts less cash expenses	-6.81	-6.53	-4.34
Capital replacement 2/	3.94	4.09	4.31
Total, cash expenses and replacement	51.42	52.00	59.88
Net cash returns	-10.75	-10.62	-8.65

Table 47B--U.S. feeder pig finishing production economic costs and returns, 140-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	40.67	41.38	51.23
Economic (full ownership) costs:			
Variable cash expenses	40.37	40.86	48.49
General farm overhead	1.85	1.95	2.02
Taxes and insurance	.56	.57	.58
Capital replacement	3.94	4.09	4.31
Operating capital 3/	.47	.55	.60
Other nonland capital 4/	.96	1.04	1.17
Land 5/	.14	.18	.18
Unpaid labor (0.78 hr)	3.35	3.65	3.66
Total, economic costs	51.64	52.89	61.01
Residual returns to management and risk	-10.97	-11.51	-9.78

See footnotes at end of Table 55B.

Table 48A--U.S. feeder pig finishing production cash costs and returns, 300-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Slaughter hogs (100 lbs) 1/	42.53	43.16	53.37
Total	42.53	43.16	53.37
Cash expenses:			
Feeders--			
Feeder pigs (22.6 lbs)	15.91	14.95	22.91
Feed--			
Grain (241.8 lbs)	9.75	10.50	10.39
Protein supplements (44.6 lbs)	7.68	7.66	6.62
Pasture	.04	.03	.04
Total feed costs	17.47	18.19	17.05
Other--			
Veterinary and medicine	.53	.57	.59
Livestock hauling	.26	.27	.28
Marketing	.52	.54	.56
Bedding (8 lbs)	.09	.10	.10
Custom feed mixing	.00	.00	.00
Fuel, lube, and electricity	1.06	1.41	1.59
Machinery and building repairs	1.80	1.86	1.91
Hired labor (0.11 hr)	.53	.58	.57
Manure credit	-.13	-.14	-.13
Total, variable cash expenses	38.04	38.33	45.43
General farm overhead	1.91	2.01	2.08
Taxes and insurance	.51	.50	.50
Interest	4.85	4.66	4.62
Total, fixed cash expenses	7.27	7.17	7.20
Total, cash expenses	45.31	45.50	52.63
Cash receipts less cash expenses	-2.78	-2.34	.74
Capital replacement 2/	3.16	3.29	3.38
Total, cash expenses and replacement	48.47	48.79	56.01
Net cash returns	-5.94	-5.63	-2.64

Table 48B--U.S. feeder pig finishing production economic costs and returns, 300-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	42.53	43.16	53.37
Economic (full ownership) costs:			
Variable cash expenses	38.04	38.33	45.43
General farm overhead	1.91	2.01	2.08
Taxes and insurance	.51	.50	.50
Capital replacement	3.16	3.29	3.38
Operating capital 3/	.44	.51	.57
Other nonland capital 4/	.73	.80	.87
Land 5/	.05	.06	.06
Unpaid labor (0.43 hr)	1.95	2.12	2.09
Total, economic costs	46.79	47.62	54.98
Residual returns to management and risk	-4.26	-4.46	-1.61

See footnotes at end of Table 55B.

Table 49A--U.S. feeder pig finishing production cash costs and returns, 650-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Slaughter hogs (100 lbs) 1/	43.08	43.71	54.05
Total	43.08	43.71	54.05
Cash expenses:			
Feeders--			
Feeder pigs (22.4 lbs)	15.49	14.53	22.27
Feed--			
Grain (242 lbs)	9.72	10.44	10.32
Protein supplements (44.7 lbs)	7.58	7.57	6.54
Pasture	0	0	0
Total feed costs	17.30	18.01	16.86
Other--			
Veterinary and medicine	.46	.50	.52
Livestock hauling	.09	.10	.10
Marketing	.46	.48	.50
Bedding (14 lbs)	.16	.17	.18
Custom feed mixing	0	0	0
Fuel, lube, and electricity	1.08	1.39	1.58
Machinery and building repairs	1.54	1.61	1.67
Hired labor (0.07 hr)	.35	.38	.38
Manure credit	-.14	-.14	-.13
Total, variable cash expenses	36.79	37.03	43.93
General farm overhead	1.93	2.03	2.10
Taxes and insurance	.41	.41	.41
Interest	4.98	4.72	4.67
Total, fixed cash expenses	7.32	7.16	7.18
Total, cash expenses	44.11	44.19	51.11
Cash receipts less cash expenses	-1.03	-.48	2.94
Capital replacement 2/	2.62	2.73	2.84
Total, cash expenses and replacement	46.73	46.92	53.95
Net cash returns	-3.65	-3.21	.10

Table 49B--U.S. feeder pig finishing production economic costs and returns, 650-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	43.08	43.71	54.05
Economic (full ownership) costs:			
Variable cash expenses	36.79	37.03	43.93
General farm overhead	1.93	2.03	2.10
Taxes and insurance	.41	.41	.41
Capital replacement	2.62	2.73	2.84
Operating capital 3/	.42	.50	.55
Other nonland capital 4/	.60	.66	.73
Land 5/	.01	.01	.01
Unpaid labor (0.37 hr)	1.59	1.74	1.71
Total, economic costs	44.37	45.11	52.28
Residual returns to management and risk	-1.29	-1.40	1.77

See footnotes at end of Table 55B.



Table 50A--U.S. feeder pig finishing production cash costs and returns, 1,600-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Slaughter hogs (100 lbs) 1/	43.10	43.73	54.08
Total	43.10	43.73	54.08
Cash expenses:			
Feeders--			
Feeder pigs (22.5 lbs)	15.52	14.56	22.31
Feed--			
Grain (240.8 lbs)	9.70	10.41	10.29
Protein supplements (48.3 lbs)	7.54	7.54	6.52
Pasture	0	0	0
Total feed costs	17.24	17.95	16.81
Other--			
Veterinary and medicine	.48	.52	.54
Livestock hauling	.19	.21	.21
Marketing	.45	.47	.49
Bedding (6 lbs)	.09	.09	.10
Custom feed mixing	0	0	0
Fuel, lube, and electricity	1.02	1.22	1.40
Machinery and building repairs	1.74	1.81	1.87
Hired labor (0.08 hr)	.54	.58	.58
Manure credit	-.13	-.14	-.13
Total, variable cash expenses	37.14	37.27	44.18
General farm overhead	1.93	2.03	2.10
Taxes and insurance	.53	.53	.53
Interest	4.91	4.72	4.67
Total, fixed cash expenses	7.37	7.28	7.30
Total, cash expenses	44.51	44.55	51.48
Cash receipts less cash expenses	-1.41	-.82	2.60
Capital replacement 2/	3.58	3.70	3.80
Total, cash expenses and replacement	48.09	48.25	55.28
Net cash returns	-4.99	-4.52	-1.20

Table 50B--U.S. feeder pig finishing production economic costs and returns, 1,600-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	43.10	43.73	54.08
Economic (full ownership) costs:			
Variable cash expenses	37.14	37.27	44.18
General farm overhead	1.93	2.03	2.10
Taxes and insurance	.53	.53	.53
Capital replacement	3.58	3.70	3.80
Operating capital 3/	.43	.50	.55
Other nonland capital 4/	.83	.90	.98
Land 5/	.01	.01	.01
Unpaid labor (0.19 hr)	1.10	1.20	1.18
Total, economic costs	45.55	46.14	53.33
Residual returns to management and risk	-2.45	-2.41	.75

See footnotes at end of Table 55B.

Table 51A--U.S. feeder pig finishing production cash costs and returns, 3,000-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Slaughter hogs (100 lbs) 1/	43.09	43.72	54.06
Total	43.09	43.72	54.06
Cash expenses:			
Feeders--			
Feeder pigs (22.8 lbs)	15.71	14.75	22.61
Feed--			
Grain (235.8 lbs)	9.64	10.36	10.25
Protein supplements (79.3 lbs)	7.10	7.11	6.10
Pasture	0	0	0
Total feed costs	16.74	17.47	16.35
Other--			
Veterinary and medicine	.35	.37	.39
Livestock hauling	.18	.19	.20
Marketing	.44	.46	.48
Bedding (4 lbs)	.06	.06	.06
Custom feed mixing	0	0	0
Fuel, lube, and electricity	.82	.98	1.13
Machinery and building repairs	1.62	1.69	1.79
Hired labor (0.04 hr)	.37	.40	.40
Manure credit	-.12	-.13	-.12
Total, variable cash expenses	36.17	36.24	43.29
General farm overhead	1.93	2.04	2.10
Taxes and insurance	.46	.46	.47
Interest	4.91	4.72	4.68
Total, fixed cash expenses	7.30	7.22	7.25
Total, cash expenses	43.47	43.46	50.54
Cash receipts less cash expenses	-.38	.26	3.52
Capital replacement 2/	2.90	3.02	3.17
Total, cash expenses and replacement	46.37	46.48	53.71
Net cash returns	-3.28	-2.76	.35

Table 51B--U.S. feeder pig finishing production economic costs and returns, 3,000-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	43.09	43.72	54.06
Economic (full ownership) costs:			
Variable cash expenses	36.17	36.24	43.29
General farm overhead	1.93	2.04	2.10
Taxes and insurance	.46	.46	.47
Capital replacement	2.90	3.02	3.17
Operating capital 3/	.42	.49	.54
Other nonland capital 4/	.70	.77	.86
Land 5/	.01	.01	.01
Unpaid labor (0.14 hr)	1.12	1.21	1.19
Total, economic costs	43.71	44.24	51.63
Residual returns to management and risk	-.62	-.52	2.43

See footnotes at end of Table 55B.

Table 52A--U.S. feeder pig finishing production cash costs and returns, 10,000-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Slaughter hogs (100 lbs) 1/	43.07	43.70	54.04
Total	43.07	43.70	54.04
Cash expenses:			
Feeders--			
Feeder pigs (23.1 lbs)	15.94	14.97	22.97
Feed--			
Grain (232.1 lbs)	9.66	10.38	10.28
Protein supplements (76.9 lbs)	6.47	6.50	5.66
Pasture	0	0	0
Total feed costs	16.13	16.88	15.94
Other--			
Veterinary and medicine	.52	.56	.59
Livestock hauling	.15	.16	.17
Marketing	.24	.26	.27
Bedding (2 lbs)	.03	.03	.03
Custom feed mixing	0	0	0
Fuel, lube, and electricity	.67	.81	.93
Machinery and building repairs	1.49	1.56	1.66
Hired labor (0.08 hr)	.66	.72	.71
Manure credit	-.23	-.24	-.23
Total, variable cash expenses	35.60	35.71	43.04
General farm overhead	1.94	2.04	2.11
Taxes and insurance	.43	.43	.45
Interest	4.91	4.73	4.68
Total, fixed cash expenses	7.28	7.20	7.24
Total, cash expenses	42.88	42.91	50.28
Cash receipts less cash expenses	.19	.79	3.76
Capital replacement 2/	2.74	2.84	3.01
Total, cash expenses and replacement	45.62	45.75	53.29
Net cash returns	-2.55	-2.05	.75

Table 52B--U.S. feeder pig finishing production economic costs and returns, 10,000-head operation, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	43.07	43.70	54.04
Economic (full ownership) costs:			
Variable cash expenses	35.60	35.71	43.04
General farm overhead	1.94	2.04	2.11
Taxes and insurance	.43	.43	.45
Capital replacement	2.74	2.84	3.01
Operating capital 3/	.41	.47	.54
Other nonland capital 4/	.65	.71	.80
Land 5/	.01	.01	.01
Unpaid labor (0.09 hr)	.70	.76	.74
Total, economic costs	42.48	42.97	50.70
Residual returns to management and risk	.59	.73	3.34

See footnotes at end of Table 55B.



Table 53A--Feeder pig finishing production cash costs and returns, all of operation, North-Central, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Cash receipts:			
Slaughter hogs (100 lbs) 1/	42.84	43.50	53.80
Total	42.84	43.50	53.80
Cash expenses:			
Feeders--			
Feeder pigs (22.1 lbs)	15.34	14.38	22.01
Feed--			
Grain (239.5 lbs)	9.45	10.13	10.00
Protein supplements (45.4 lbs)	7.34	7.33	6.33
Pasture	0	0	0
Total feed costs	16.79	17.46	16.33
Other--			
Veterinary and medicine	.50	.53	.55
Livestock hauling	.17	.19	.20
Marketing	.46	.48	.50
Bedding (10 lbs)	.11	.12	.13
Custom feed mixing	0	0	0
Fuel, lube, and electricity	.95	1.21	1.38
Machinery and building repairs	1.65	1.72	1.75
Hired labor (0.07 hr)	.43	.48	.47
Manure credit	-.17	-.18	-.17
Total, variable cash expenses	36.23	36.39	43.15
General farm overhead	1.91	2.01	2.08
Taxes and insurance	.47	.46	.47
Interest	4.84	4.66	4.61
Total, fixed cash expenses	7.22	7.13	7.16
Total, cash expenses	43.45	43.52	50.31
Cash receipts less cash expenses	-.61	-.02	3.49
Capital replacement 2/	3.06	3.16	3.22
Total, cash expenses and replacement	46.51	46.68	53.53
Net cash returns	-3.67	-3.18	.27

Table 53B--Feeder pig finishing production economic costs and returns, all of operation, North-Central, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	42.84	43.50	53.80
Economic (full ownership) costs:			
Variable cash expenses	36.23	36.39	43.15
General farm overhead	1.91	2.01	2.08
Taxes and insurance	.47	.46	.47
Capital replacement	3.06	3.16	3.22
Operating capital 3/	.42	.49	.54
Other nonland capital 4/	.72	.79	.85
Land 5/	.01	.01	.01
Unpaid labor (0.29 hr)	1.41	1.54	1.51
Total, economic costs	44.23	44.85	51.83
Residual returns to management and risk	-1.39	-1.35	1.97

See footnotes at end of Table 55B.

Table 54A--Feeder pig finishing production cash costs and returns, all of operation, Southeast, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
<b>Cash receipts:</b>			
Slaughter hogs (100 lbs) 1/	42.82	43.45	53.73
Total	42.82	43.45	53.73
<b>Cash expenses:</b>			
<b>Feeders--</b>			
Feeder pigs (25.7 lbs)	17.76	16.64	25.47
<b>Feed--</b>			
Grain (237 lbs)	11.17	11.98	11.81
Protein supplements (66 lbs)	7.33	7.37	6.40
Pasture	.09	.08	.08
Total feed costs	18.59	19.43	18.29
<b>Other--</b>			
Veterinary and medicine	.43	.46	.48
Livestock hauling	.09	.10	.10
Marketing	.41	.43	.44
Bedding (2 lbs)	.02	.02	.02
Custom feed mixing	.46	.44	.46
Fuel, lube, and electricity	1.04	1.13	1.33
Machinery and building repairs	1.71	1.77	1.87
Hired labor (0.09 hr)	.58	.60	.62
Manure credit	0	0	0
Total, variable cash expenses	41.09	41.02	49.08
General farm overhead	1.95	2.06	2.13
Taxes and insurance	.53	.52	.54
Interest	4.96	7.77	4.72
Total, fixed cash expenses	7.44	10.35	7.39
Total, cash expenses	48.53	51.37	56.47
Cash receipts less cash expenses	-5.71	-7.92	-2.74
Capital replacement 2/	3.29	3.39	3.80
Total, cash expenses and replacement	51.82	54.76	60.27
Net cash returns	-9.00	-11.31	-6.54

Table 54B--Feeder pig finishing production economic costs and returns, all of operation, Southeast, 1988-90

Item	1988	1989	1990
<u>Dollars per cwt</u>			
Total, cash receipts	42.82	43.45	53.73
<b>Economic (full ownership) costs:</b>			
Variable cash expenses	41.09	41.02	49.08
General farm overhead	1.95	2.06	2.13
Taxes and insurance	.53	.52	.54
Capital replacement	3.29	3.39	3.80
Operating capital 3/	.47	.55	.61
Other nonland capital 4/	.74	.80	.96
Land 5/	.08	.09	.09
Unpaid labor (0.31 hr)	1.47	1.52	1.56
Total, economic costs	49.62	49.95	58.77
Residual returns to management and risk	-6.80	-6.50	-5.04

See footnotes at end of Table 55B.

Table 55A--U.S. sheep production cash costs and returns, all sizes of operation,  
1988-90

Item	1988	1989	1990
<u>Dollars per ewe</u>			
Cash receipts			
Slaughter lambs (31.9 lbs) 1/	20.36	19.56	16.67
Feeder lambs (26.6 lbs)	21.06	19.56	14.92
Cull ewes (29.1 lbs)	6.76	6.76	6.24
Wool (10 lbs)	15.17	13.46	9.50
Wool payment	4.41	6.08	12.77
Unshorn lamb payment	.87	1.21	2.17
Total	68.63	66.63	62.27
Cash expenses:			
Feed--			
Grain (0.74 bu)	2.00	2.18	2.04
Protein supplements (0.38 cwt)	4.30	4.49	4.29
Salt and minerals (7 lbs)	.40	.42	.43
Hay (0.1 ton)	3.89	3.58	3.68
Pasture	3.12	3.37	3.23
Public grazing	.77	.94	.93
Crop residue	.05	.06	.06
Total feed costs	14.53	15.04	14.66
Other--			
Veterinary and medicine	1.13	1.22	1.28
Livestock hauling	1.27	1.36	1.45
Marketing	.32	.34	.35
Ram death loss	.30	.28	.21
Shearing and tagging	1.26	1.30	1.36
Fuel, lube, and electricity	1.19	1.38	1.54
Machinery and building repairs	2.44	2.54	2.62
Hired labor (1.42 hrs)	6.76	6.99	7.31
Miscellaneous	1.25	1.32	1.39
Total, variable cash expenses	30.45	31.77	32.17
General farm overhead	3.49	3.67	3.80
Taxes and insurance	2.80	3.00	3.02
Interest	6.13	5.90	5.84
Total, fixed cash expenses	12.42	12.63	12.66
Total, cash expenses	42.87	44.40	44.83
Cash receipts less cash expenses	25.76	22.23	17.44
Capital replacement 2/	7.96	8.13	8.19
Total, cash expenses and replacement	50.83	52.53	53.02
Net cash receipts	17.80	14.10	9.25

See footnotes at end of Table 55B.



Table 55B--U.S. sheep production economic costs and returns, all sizes of operation, 1988-90

Item	1988	1989	1990
<u>Dollars per ewe</u>			
Total, cash receipts	68.63	66.63	62.27
Economic (full ownership) costs:			
Variable cash expenses	30.45	31.77	32.17
General farm overhead	3.49	3.67	3.80
Taxes and insurance	2.80	3.00	3.02
Capital replacement	7.96	8.13	8.19
Operating capital 3/	1.05	1.28	1.20
Other nonland capital 4/	3.52	3.74	3.88
Land 5/	6.09	7.87	8.90
Unpaid labor (2.1 hrs)	7.93	8.22	8.64
Total, economic costs	63.29	67.68	69.80
Residual returns to management and risk	5.34	-1.05	-7.53

1/ Quantities per unit in the parentheses are for the latest survey year and will vary for earlier years. 2/ Capital replacement cost is treated as a cash cost. 3/ Variable expense items multiplied by part of year used and 6-month U.S. Treasury bill rates. 4/ Value of machinery and equipment multiplied by longrun real rate of return to production assets in farm sector. 5/ Value of land multiplied by longrun real rate of return to production assets in the farm sector. 6/ Estimates of costs and returns for the 1985-88 are based on 1985 dairy Farm Costs and Returns Survey, while estimates for the 1989-90 are based on the 1989 dairy FCRS. 6/ Expenses for paid and unpaid labor for the 1985-88 dairy costs of production are backcasted by the indexes of prices paid for wage rates from the 1989 dairy FCRS. 7/ Cash receipts used as a proxy for the value of production.

Table 56A--U.S. milk production cash costs and returns, all sizes of operation, per cwt, 1972-88

Item	1972	1973	1974	1975	1976	1977	1978	1979
<u>Dollars</u>								
Cash receipts:								
Milk	6.07	7.13	8.33	8.58	9.57	9.62	10.49	11.93
Cattle	0.79	1.03	.79	.65	.75	.74	1.06	1.49
Total	6.86	8.16	9.12	9.23	10.32	10.36	11.55	13.42
Cash expenses:								
Feed--	2.28	3.17	3.95	3.99	4.10	3.86	3.79	4.32
Concentrates	1.51	2.17	2.72	2.71	2.71	2.66	2.68	3.02
Byproducts								
Hay	.44	.57	.70	.73	.79	.69	.64	.74
Silage	.31	.40	.49	.51	.56	.48	.44	.52
Pasture and other forage	.02	.03	.04	.04	.04	.03	.03	.04
Other--								
Milk hauling and marketing	.31	.32	.33	.31	.31	.32	.33	.38
Artificial insemination	.05	.05	.06	.07	.08	.08	.08	.09
Veterinary and medicine	.12	.13	.14	.16	.17	.17	.17	.18
Livestock hauling	.01	.01	.02	.01	.01	.01	.01	.02
Fuel, lube, and electricity	.12	.13	.17	.19	.19	.20	.21	.27
Machinery and building repairs	.20	.22	.26	.30	.28	.27	.28	.30
Hired labor	.45	.50	.56	.60	.62	.65	.69	.74
DHIA fees	.02	.02	.03	.03	.03	.04	.04	.04
Dairy supplies	.09	.10	.12	.14	.14	.14	.15	.17
Dairy assessment				0	0	0	0	0
Total, variable cash expenses	3.65	4.65	5.64	5.80	5.93	5.74	5.75	6.51
General farm overhead	.09	.12	.16	.19	.23	.24	.29	.38
Taxes and insurance	.10	.12	.15	.14	.16	.18	.21	.29
Interest	.41	.52	.65	.68	.76	.74	.83	1.08
Total, fixed cash expenses	.60	.76	.96	1.01	1.15	1.16	1.33	1.75
Total, cash expenses	4.25	5.41	6.60	6.81	7.08	6.90	7.08	8.26
Cash receipts less cash expenses	2.61	2.75	2.52	2.42	3.24	3.46	4.47	5.16
Capital replacement	.73	.86	.98	.87	.92	.96	1.14	1.47
Total, cash expenses and replacement	4.98	6.27	7.58	7.68	8.00	7.86	8.22	9.73
Net cash returns	1.88	1.89	1.54	1.55	2.32	2.50	3.33	3.69

Continued--

Table 56B--U.S. milk production economic costs and returns, all sizes of operation, per cwt, 1972-88

Item	1972	1973	1974	1975	1976	1977	1978	1979
<u>Dollars</u>								
Total, cash receipts	6.86	8.16	9.12	9.23	10.32	10.36	11.55	13.42
Economic (full ownership) costs:								
Variable cash expenses	3.65	4.65	5.64	5.80	5.93	5.74	5.75	6.51
General farm overhead	.09	.12	.16	.19	.23	.24	.29	.38
Taxes and insurance	.10	.12	.15	.14	.16	.18	.21	.29
Capital replacement	.73	.86	.98	.87	.92	.96	1.14	1.47
Operating capital	.06	.10	.11	.08	.06	.06	.09	.12
Other nonland capital	.33	.40	.51	.48	.51	.51	.58	.75
Land	.22	.23	.25	.17	.18	.20	.21	.23
Unpaid labor	.80	.88	.99	1.06	1.10	1.15	1.22	1.32
Total, economic costs	5.98	7.36	8.79	8.79	9.09	9.04	9.49	11.07
Residual returns to management and risk	.88	.80	.33	.44	1.23	1.32	2.06	2.35
Pounds of milk per unit	11,531	11,373	11,569	11,611	12,309	12,645	12,696	12,912

Continued--

Table 56A--U.S. milk production cash costs and returns, United States, per cwt, 1972-88--continued

Item	1980	1981	1982	1983	1984	1985	1986	1987	1988
<u>Dollars</u>									
Cash receipts:									
Milk	12.95	13.69	13.52	13.50	13.38	12.70	12.47	12.51	12.23
Cattle	1.38	1.25	1.14	1.09	1.07	1.06	1.02	1.18	1.24
Total	14.33	14.94	14.66	14.59	14.45	13.76	13.49	13.69	13.47
Cash expenses:									
Feed--	4.86	4.85	4.72	4.88	4.91	5.30	5.06	4.82	5.90
Concentrates	3.35	3.45	3.28	3.43	3.47	3.35	3.19	3.06	3.42
Byproducts						.21	.20	.18	.22
Hay	.86	.80	.86	.85	.82	1.10	1.04	.99	1.37
Silage	.61	.56	.54	.56	.58	.58	.57	.53	.82
Pasture and other forage	.04	.04	.04	.04	.04	.06	.06	.06	.07
Other--									
Milk hauling and marketing	.43	.45	.45	.44	.45	.58	.55	.61	.61
Artificial insemination	.10	.11	.12	.12	.12	.12	.12	.12	.12
Veterinary and medicine	.19	.20	.20	.21	.22	.20	.20	.20	.20
Livestock hauling	.02	.02	.02	.02	.02	.03	.03	.03	.03
Fuel, lube, and electricity	.38	.40	.40	.37	.33	.32	.22	.23	.22
Machinery and building repairs	.33	.35	.37	.37	.37	.40	.39	.38	.38
Hired labor	.77	.83	.87	.85	.91	.75	.75	.76	.79
DHIA fees	.04	.05	.05	.05	.05	.06	.06	.06	.06
Dairy supplies	.18	.19	.19	.19	.19	.21	.19	.19	.20
Dairy assessment	.00	.00	.00	.48	.50	.13	.36	.19	.03
Miscellaneous									
Total, variable cash expenses	7.30	7.45	7.39	7.98	8.07	8.10	7.93	7.59	8.54
General farm overhead	.46	.54	.60	.50	.60	.53	.59	.70	.81
Taxes and insurance	.34	.37	.35	.36	.34	.37	.35	.35	.39
Interest	1.29	1.52	1.56	1.55	1.63	1.41	1.23	1.03	1.02
Total, fixed cash expenses	2.09	2.43	2.51	2.41	2.57	2.31	2.17	2.08	2.22
Total, cash expenses	9.39	9.88	9.90	10.39	10.64	10.41	10.10	9.67	10.76
Cash receipts less cash expenses	4.94	5.06	4.76	4.20	3.81	3.35	3.39	4.02	2.71
Capital replacement	1.61	1.64	1.57	1.58	1.56	1.70	1.64	1.59	1.70
Total, cash expenses and replacement	11.00	11.52	11.47	11.97	12.20	12.11	11.74	11.26	12.46
Net cash returns	3.33	3.42	3.19	2.62	2.25	1.65	1.75	2.43	1.01

Table 56B--U.S. milk production economic costs and returns, United States, per cwt, 1972-88--continued

Item	1980	1981	1982	1983	1984	1985	1986	1987	1988
<u>Dollars</u>									
Total, cash receipts	14.33	14.94	14.66	14.59	14.45	13.76	13.49	13.69	13.47
Economic (full ownership) costs:									
Variable cash expenses	7.30	7.45	7.39	7.98	8.07	8.10	7.93	7.59	8.54
General farm overhead	.46	.54	.60	.50	.60	.53	.59	.70	.81
Taxes and insurance	.34	.37	.35	.36	.34	.37	.35	.35	.39
Capital replacement	1.61	1.64	1.57	1.58	1.56	1.70	1.64	1.59	1.70
Operating capital	.13	.15	.12	.12	.12	.08	.05	.06	.08
Other nonland capital	.80	.77	.71	.64	.49	.53	.52	.58	.65
Land	.26	.26	.25	.24	.19	.18	.14	.14	.18
Unpaid labor	1.37	1.46	1.51	1.49	1.58	1.67	1.68	1.69	1.76
Total, economic costs	12.27	12.64	12.50	12.91	12.95	13.16	12.90	12.70	14.11
Residual returns to management and risk	2.06	2.30	2.16	1.68	1.50	.60	.59	.99	.64
Pounds of milk per unit	13,344	13,619	13,762	14,095	13,955	13,240	13,501	14,062	14,369



Table 57A--U.S. fed cattle production cash costs and returns, all sizes of operation, 1972-87

Item	1972	1973	1974	1975	1976	1977	1978	1979
<u>Dollars per cwt</u>								
Cash receipts:								
Fed beef	35.76	44.20	38.97	41.79	38.97	40.18	52.40	67.85
Total	35.76	44.20	38.97	41.79	38.97	40.18	52.40	67.85
=====								
Cash expenses:								
Feeders--								
Feeder cattle	22.58	28.93	20.60	18.41	21.48	21.92	27.84	44.67
Feed--								
Haylage	.03	.04	.06	.06	.07	.06	.05	.05
Silage	.62	.77	1.04	1.07	1.22	1.08	.94	.86
Dry grain & concentrates	6.82	10.90	16.65	15.41	14.33	10.99	9.36	10.61
Protein supplements	1.33	2.90	2.15	1.76	1.76	2.15	1.95	2.12
Legume hay	.39	.49	.66	.68	.78	.69	.60	.72
Other roughages	.13	.16	.21	.22	.25	.22	.20	.23
Pasture	0	0	0	0	0	0	0	0
Crop residue	0	0	0	0	0	0	0	0
Total feed costs	9.33	15.26	20.76	19.20	18.41	15.19	13.10	14.59
Other--								
Veterinary and medicine	.29	.31	.34	.37	.39	.38	.41	.44
Livestock hauling	.10	.11	.12	.13	.13	.13	.14	.12
Marketing	.05	.06	.06	.07	.07	.07	.08	.08
Bedding	.03	.03	.04	.04	.04	.04	.04	.04
Fuel, lube, and electricity	.21	.22	.30	.33	.35	.38	.40	.49
Machinery and building repairs	.25	.26	.36	.40	.43	.46	.50	.49
Hired labor	.28	.30	.35	.37	.41	.44	.47	.52
Miscellaneous	.29	.31	.38	.45	.47	.50	.53	.60
Manure credit	-.07	-.07	-.07	-.07	-.07	-.07	-.07	-.08
Total, variable cash expenses	33.33	45.72	43.24	39.71	42.11	39.44	43.44	61.96
General farm overhead	.24	.59	.50	.45	.48	.62	.60	.76
Taxes and insurance	.12	.15	.14	.15	.14	.14	.17	.16
Hired management	.07	.09	.08	.08	.08	.08	.08	.10
Interest	2.07	2.56	2.26	2.42	2.26	2.33	3.12	4.32
Total, fixed cash expenses	2.51	3.39	2.97	3.10	2.95	3.17	3.97	5.34
Total, cash expenses	35.83	49.11	46.21	42.81	45.06	42.61	47.41	67.30
Cash receipts less cash expenses	-.07	-4.91	-7.24	-1.02	-6.09	-2.43	4.99	.55
Capital replacement	.93	.98	1.08	1.17	1.23	1.21	1.34	1.57
Total, cash expenses and replacement	36.76	50.09	47.29	43.98	46.30	43.82	48.75	68.87
Net cash returns	-1.00	-5.89	-8.31	-2.19	-7.32	-3.64	3.65	-1.02

Continued--

Table 57B--U.S. fed cattle production economic costs and returns, all sizes of operation, 1972-87

Item	1972	1973	1974	1975	1976	1977	1978	1979
<u>Dollars per cwt</u>								
Total, cash receipts	35.76	44.20	38.97	41.79	38.97	40.18	52.40	67.85
=====								
Economic (full ownership) costs:								
Variable cash expenses	33.33	45.72	43.24	39.71	42.11	39.44	43.44	61.96
General farm overhead	.24	.59	.50	.45	.48	.62	.60	.76
Taxes and insurance	.12	.15	.14	.15	.14	.14	.17	.16
Capital replacement	.93	.98	1.08	1.17	1.23	1.21	1.34	1.57
Hired management	.07	.09	.08	.08	.08	.08	.08	.10
Operating capital	.31	.66	.69	.49	.45	.44	.67	1.26
Other nonland capital	.38	.40	.44	.48	.50	.49	.49	.42
Land	.03	.04	.05	.06	.07	.08	.08	.10
Unpaid labor	.63	.66	.73	.80	.84	.82	.90	.81
Total, economic costs	36.05	49.29	46.94	43.38	45.89	43.32	47.77	67.14
Residual returns to management and risk	-.29	-5.09	-7.97	-1.59	-6.92	-3.14	4.63	.71

Continued--

Table 57A--U.S. fed cattle production cash costs and returns, all operation, 1972-87--continued

Item	1980	1981	1982	1983	1984	1985	1986	1987
<u>Dollars per cwt</u>								
Cash receipts:								
Fed beef	66.20	63.41	63.62	62.12	64.95	59.49	58.42	65.44
Total	66.20	63.41	63.62	62.12	64.95	59.49	58.42	65.44
Cash expenses:								
Feeders--								
Feeder cattle	47.33	42.90	39.05	37.62	38.53	38.90	36.17	43.99
Feed--								
Haylage	.05	.06	.06	.07	.06	.05	.04	.04
Silage	.96	1.22	.94	.85	.94	.92	.93	.90
Dry grain & concentrates	12.13	13.51	10.98	13.60	14.00	11.54	9.53	7.57
Protein supplements	2.22	2.38	2.25	2.37	2.00	2.07	2.61	2.56
Legume hay	.79	.98	.96	1.04	1.25	1.02	.91	.93
Other roughages	.27	.39	.41	.43	.64	.55	.00	.00
Pasture	.00	.00	.00	.00	.00	.00	.00	.00
Crop residue	.00	.00	.00	.00	.00	.00	.00	.00
Total feed costs	16.42	18.54	15.60	18.36	18.89	16.15	14.02	12.00
Other--								
Veterinary and medicine	.47	.51	.49	.51	.51	.52	.55	.57
Livestock hauling	.15	.17	.16	.15	.14	.15	.24	.24
Marketing	.08	.08	.08	.07	.06	.06	.06	.06
Bedding	.04	.06	.05	.05	.04	.05	.06	.07
Fuel, lube, and electricity	.67	.76	.72	.67	.51	.48	.49	.48
Machinery and building repairs	.53	.57	.56	.58	.51	.55	.56	.58
Hired labor	.56	.60	.63	.64	.75	.76	.80	.74
Miscellaneous	.75	.84	.93	.97	1.01	1.00	.89	.90
Manure credit	-.10	-.11	-.11	-.10	-.08	-.08	-.07	-.06
Total, variable cash expenses	66.90	64.92	58.16	59.52	60.87	58.54	53.77	59.57
General farm overhead	.90	.93	.99	.98	1.05	.93	1.11	1.41
Taxes and insurance	.17	.17	.18	.18	.16	.16	.17	.18
Hired management	.11	.12	.13	.14	.11	.11	.13	.12
Interest	4.69	5.08	5.40	5.01	4.81	4.28	5.09	5.77
Total, fixed cash expenses	5.87	6.30	6.70	6.31	6.13	5.48	6.50	7.48
Total, cash expenses	72.77	71.22	64.86	65.83	67.00	64.02	60.27	67.05
Cash receipts less cash expenses	-6.57	-7.81	-1.24	-3.71	-2.05	-4.53	-1.85	-1.61
Capital replacement	1.12	1.23	1.19	1.21	1.07	1.11	1.17	1.22
Total, cash expenses and replacement	73.89	72.45	66.05	67.04	68.07	65.13	61.44	68.27
Net cash returns	-7.69	-9.04	-2.43	-4.92	-3.12	-5.64	-3.02	-2.83

Table 57B--U.S. fed cattle production economic costs and returns, all sizes of operation, 1972-87--continued

Item	1980	1981	1982	1983	1984	1985	1986	1987
<u>Dollars per cwt</u>								
Total, cash receipts	66.20	63.41	63.62	62.12	64.95	59.49	58.42	65.44
Economic (full ownership) costs:								
Variable cash expenses	66.90	64.92	58.16	59.52	60.87	58.54	53.77	59.57
General farm overhead	.90	.93	.99	.98	1.05	.93	1.11	1.41
Taxes and insurance	.17	.17	.18	.18	.16	.16	.17	.18
Capital replacement	1.12	1.23	1.19	1.21	1.07	1.11	1.17	1.22
Hired management	.11	.12	.13	.14	.11	.11	.13	.12
Operating capital	1.49	1.81	1.31	1.06	1.21	.91	.59	.73
Other nonland capital	.41	.38	.34	.31	.23	.43	.23	.27
Land	.11	.12	.12	.11	.08	.07	.04	.04
Unpaid labor	.58	.60	.55	.52	.47	1.39	.55	.60
Total, economic costs	71.79	70.28	62.96	64.02	65.26	63.65	57.76	64.14
Residual returns to management and risk	-5.59	-6.87	.66	-1.90	-.31	-4.16	.66	1.30

Table 58A--U.S. cow-calf production cash costs and returns, all sizes of operation, 1972-87

Item	1972	1973	1974	1975	1976	1977	1978	1979
<u>Dollars per cow</u>								
Cash receipts:								
Steer calves	44.78	57.51	40.97	36.68	39.52	43.46	77.16	103.94
Heifer calves	26.50	34.04	24.25	21.71	23.38	25.72	45.66	61.51
Yearling steers	29.06	37.32	26.59	23.80	34.42	28.20	48.34	83.37
Yearling heifers	18.25	23.44	16.70	14.95	21.62	17.71	30.36	52.36
Cull cows	21.80	22.11	18.24	21.89	15.79	31.82	43.03	51.12
Total	140.39	174.42	126.75	119.03	134.73	146.91	244.55	352.30
Cash expenses:								
Feed--								
Grain	3.44	5.56	8.59	7.94	7.32	5.97	6.56	7.78
Silage	1.34	2.16	3.34	3.09	2.85	2.32	2.20	2.66
Protein supplements	4.25	9.24	6.81	5.58	5.58	6.84	9.21	12.34
Salt and minerals	1.52	1.63	1.83	2.07	2.25	2.55	2.60	2.65
Hay	27.13	31.00	36.28	45.38	47.21	35.03	33.05	29.86
Pasture	24.61	28.26	29.15	29.18	29.84	29.66	30.84	34.15
Public grazing	.63	.73	.93	.93	1.37	1.37	1.12	1.08
Crop residue (purchased)	.06	.06	.06	.06	.06	.07	.07	.06
Total feed costs	62.98	78.64	86.99	94.23	96.48	83.81	85.65	90.58
Other--								
Veterinary and medicine	3.85	4.01	3.82	3.98	3.79	3.94	4.45	4.54
Livestock hauling	.95	1.04	.95	1.03	.94	1.02	1.07	1.23
Marketing	2.48	2.63	2.46	2.61	2.44	2.59	3.01	3.58
Custom feed mixing	.29	.30	.29	.30	.29	.30	.34	.38
Fuel, lube, electricity	5.52	5.83	8.08	9.00	9.52	10.23	10.73	14.02
Machinery and building repairs	9.34	9.88	12.05	13.81	12.58	13.54	14.62	16.04
Hired labor	4.99	5.46	6.26	6.73	7.62	7.92	9.00	10.46
Total, variable cash expenses	90.40	107.79	120.90	131.69	133.66	123.35	128.87	140.83
General farm overhead	4.10	5.55	4.96	5.53	6.54	7.59	13.53	22.06
Taxes and insurance	11.45	11.76	12.37	13.28	16.09	15.27	16.15	19.82
Interest	8.13	11.82	10.15	11.29	17.08	18.10	30.30	48.45
Total, fixed cash expenses	23.68	29.13	27.48	30.10	39.71	40.96	59.98	90.33
Total, cash expenses	114.08	136.92	148.38	161.79	173.37	164.31	188.85	231.16
Cash receipts less cash expenses	26.31	37.50	-21.63	-42.76	-38.64	-17.40	55.70	121.14
Capital replacement	26.65	28.16	30.64	33.49	35.21	34.59	37.39	46.74
Total, cash expenses and replacement	140.73	165.08	179.02	195.28	208.58	198.90	226.24	277.90
Net cash returns	-.34	9.34	-52.27	-76.25	-73.85	-51.99	18.31	74.40

Continued--

Table 58B--U.S. cow-calf production economic costs and returns, all sizes of operation, 1972-87

Item	1972	1973	1974	1975	1976	1977	1978	1979
<u>Dollars per cow</u>								
Total, cash receipts	140.39	174.42	126.75	119.03	134.73	146.91	244.55	352.30
Economic (full ownership) costs:								
Variable cash expenses	90.40	107.79	120.90	131.69	133.66	123.35	128.87	140.83
General farm overhead	4.10	5.55	4.96	5.53	6.54	7.59	13.53	22.06
Taxes and insurance	11.45	11.76	12.37	13.28	16.09	15.27	16.15	19.82
Capital replacement	26.65	28.16	30.64	33.49	35.21	34.59	37.39	46.74
Operating capital	2.02	3.87	4.79	4.03	3.52	3.40	4.88	7.04
Other nonland capital	28.67	30.31	33.03	36.12	37.93	36.26	35.21	34.90
Land	26.93	31.87	45.00	54.40	61.81	69.09	73.03	81.78
Unpaid labor	18.21	20.42	23.95	25.41	28.37	37.42	45.58	55.24
Total, economic costs	208.43	239.72	275.64	303.95	323.13	326.97	354.64	408.41
Residual returns to management and risk	-68.04	-65.30	-148.89	-184.92	-188.40	-180.06	-110.09	-56.11

Continued--



Table 58A--U.S. cow-calf production cash costs and returns, all sizes of operation, 1972-87--continued

Item	1980	1981	1982	1983	1984	1985	1986	1987
<u>Dollars per cow</u>								
Cash receipts:								
Steer calves	90.02	74.86	74.22	74.62	76.37	77.71	78.17	94.86
Heifer calves	53.27	44.02	44.25	43.80	44.36	46.22	47.81	59.82
Yearling steers	78.40	67.72	64.73	61.23	65.89	61.52	66.69	79.68
Yearling heifers	49.24	44.08	42.19	38.89	41.47	40.30	43.97	54.42
Cull cows	35.98	29.96	30.10	28.64	30.69	28.64	28.83	34.61
Total	306.91	260.64	255.49	247.18	258.78	254.39	265.47	323.39
Cash expenses:								
Feed--								
Grain	10.12	9.42	8.31	10.70	11.20	9.39	7.62	6.54
Silage	4.58	5.51	4.66	6.20	5.83	6.04	5.55	5.09
Protein supplements	17.28	18.21	17.26	18.13	18.69	16.00	15.83	15.97
Salt and minerals	2.13	2.41	2.40	2.52	2.62	2.69	1.96	1.98
Hay	32.03	40.23	41.47	38.99	43.34	42.96	33.34	31.77
Pasture	35.81	37.40	39.02	36.45	39.30	36.44	34.47	31.78
Public grazing	.68	.76	.75	.65	.71	.66	.69	.71
Crop residue (purchased)	.07	.07	.07	.08	.08	.07	.09	.07
Total feed costs	102.70	114.01	113.94	113.72	121.77	114.25	99.55	93.91
Other--								
Veterinary and medicine	5.05	5.52	5.91	6.11	6.31	6.38	6.60	6.72
Livestock hauling	1.40	1.75	1.70	1.74	1.80	1.85	1.86	1.85
Marketing	3.81	3.86	3.90	4.00	4.10	4.21	4.16	4.24
Custom feed mixing	.42	.44	.49	.47	.48	.49	.48	.49
Fuel, lube, electricity	19.23	21.72	21.30	19.54	16.58	16.00	11.90	12.76
Machinery and building repairs	17.60	19.31	21.17	22.09	21.58	22.51	21.71	21.83
Hired labor	11.72	13.41	13.02	13.48	13.72	13.98	14.40	14.47
Total, variable cash expenses	161.93	180.02	181.43	181.15	186.34	179.67	160.66	156.27
General farm overhead	21.94	20.68	19.47	19.26	24.13	22.43	29.20	38.81
Taxes and insurance	20.52	19.62	20.87	23.43	19.54	19.04	24.06	29.04
Interest	47.50	44.86	45.43	44.96	46.52	44.30	39.82	42.04
Total, fixed cash expenses	89.96	85.16	85.77	87.65	90.19	85.77	93.08	109.89
Total, cash expenses	251.89	265.18	267.20	268.80	276.53	265.44	253.74	266.16
Cash receipts less cash expenses	55.02	-4.54	-11.71	-21.62	-17.75	-11.05	11.73	57.23
Capital replacement	54.19	59.22	62.88	64.28	64.46	64.53	63.37	64.82
Total, cash expenses and replacement	306.08	324.40	330.08	333.08	340.99	329.97	317.11	330.98
Net cash returns	.83	-63.76	-74.59	-85.90	-82.21	-75.58	-51.64	-7.59

Table 58B--U.S. cow-calf production economic costs and returns, all sizes of operation, 1972-87--continued

Item	1980	1981	1982	1983	1984	1985	1986	1987
<u>Dollars per cow</u>								
Total, cash receipts	306.91	260.64	255.49	247.18	258.78	254.39	265.47	323.39
Economic (full ownership) costs:								
Variable cash expenses	161.93	180.02	181.43	181.15	186.34	179.67	160.66	156.27
General farm overhead	21.94	20.68	19.47	19.26	24.13	22.43	29.20	38.81
Taxes and insurance	20.52	19.62	20.87	23.43	19.54	19.04	24.06	29.04
Capital replacement	54.19	59.22	62.88	64.28	64.46	64.53	63.37	64.82
Operating capital	9.21	12.40	10.05	7.93	9.13	6.88	4.34	4.73
Other nonland capital	34.17	32.29	31.55	29.67	23.61	22.36	23.05	26.79
Land	92.95	94.57	92.86	83.72	66.15	54.86	56.21	65.50
Unpaid labor	65.29	72.11	71.71	74.68	76.73	78.27	82.56	82.30
Total, economic costs	460.20	490.91	490.82	484.12	470.09	448.04	443.45	468.26
Residual returns to management and risk	-153.29	-230.27	-235.33	-236.94	-211.31	-193.65	-177.98	-144.87

Table 59A--U.S. farrow-to-finish production cash costs and returns, all sizes of operation, 1972-87

Item	1972	1973	1974	1975	1976	1977	1978	1979
<u>Dollars per cwt</u>								
Cash receipts:								
Slaughter hogs	24.16	36.48	31.81	43.77	40.16	37.20	43.81	39.99
Cull sows	1.73	2.67	2.23	3.25	2.89	2.68	3.30	2.75
Total	25.89	39.15	34.04	47.02	43.05	39.88	47.11	42.74
Cash expenses:								
Feed--								
Grain	7.42	11.99	18.53	17.13	15.87	12.88	13.28	15.01
Protein supplements	6.94	15.10	11.14	9.12	9.35	11.18	10.56	11.67
Pasture	.02	.03	.03	.03	.03	.03	.03	.03
Total feed costs	14.39	27.12	29.69	26.28	25.25	24.09	23.87	26.71
Other--								
Veterinary and medicine	.26	.27	.30	.41	.40	.40	.41	.44
Livestock hauling	.04	.04	.05	.06	.07	.07	.08	.09
Marketing	.19	.21	.23	.25	.29	.28	.33	.30
Bedding	.05	.06	.09	.09	.08	.09	.09	.11
Custom feed mixing	.00	.00	.00	.00	.00	.00	.00	.00
Fuel, lube, and electricity	.51	.54	.74	.83	.88	.94	.99	1.29
Machinery and building repairs	1.06	1.13	1.25	1.37	1.54	1.54	1.60	1.77
Hired labor	.42	.46	.53	.57	.63	.67	.72	.79
Manure credit	-.10	-.10	-.11	-.12	-.14	-.14	-.14	-.15
Total, variable cash expenses	16.83	29.73	32.78	29.73	29.00	27.94	27.95	31.35
General farm overhead	.87	.92	1.03	1.12	1.27	1.26	1.59	1.63
Taxes and insurance	.39	.40	.42	.45	.54	.52	.56	.65
Interest	1.79	2.10	2.48	2.93	4.23	3.81	4.52	4.55
Total, fixed cash expenses	3.05	3.42	3.92	4.51	6.04	5.59	6.67	6.83
Total, cash expenses	19.88	33.15	36.70	34.24	35.04	33.53	34.62	38.18
Cash receipts less cash expenses	6.00	6.00	-2.66	12.78	8.01	6.35	12.49	4.56
Capital replacement	2.66	2.99	2.29	4.20	5.10	4.67	5.12	5.98
Total, cash expenses and replacement	22.55	36.14	38.99	38.44	40.14	38.20	39.74	44.16
Net cash returns	3.34	3.01	-4.95	8.58	2.91	1.68	7.37	-1.42

Continued--

Table 59B--U.S. farrow-to-finish production economic costs and returns, all sizes of operation, 1972-87

Item	1972	1973	1974	1975	1976	1977	1978	1979
<u>Dollars per cwt</u>								
Total, cash receipts	25.89	39.15	34.04	47.02	43.05	39.88	47.11	42.74
Economic (full ownership) costs:								
Variable cash expenses	16.83	29.73	32.78	29.73	29.00	27.94	27.95	31.35
General farm overhead	.87	.92	1.03	1.12	1.27	1.26	1.59	1.63
Taxes and insurance	.39	.40	.42	.45	.54	.52	.56	.65
Capital replacement	2.66	2.99	2.29	4.20	5.10	4.67	5.12	5.98
Operating capital	.19	.53	.65	.46	.38	.38	.53	.79
Other nonland capital	1.39	1.47	1.59	1.74	1.88	1.80	1.75	1.73
Land	.04	.05	.07	.09	.10	.11	.12	.13
Unpaid labor	2.21	2.42	2.77	2.98	3.25	3.50	3.74	4.09
Total, economic costs	24.58	38.51	41.59	40.77	41.52	40.19	41.36	46.35
Residual returns to management and risk	1.31	.64	-7.56	6.25	1.53	-.31	5.75	-3.61

Continued--

Table 59A--U.S. farrow-to-finish production cash costs and returns, all sizes of operation, 1972-87--continued

Item	1980	1981	1982	1983	1984	1985	1986	1987
<u>Dollars per cwt</u>								
Cash receipts:								
Slaughter hogs	37.62	41.67	51.70	44.66	45.79	42.10	48.00	48.48
Cull sows	1.98	2.20	2.77	2.26	2.35	2.12	2.46	2.37
Total	39.60	43.87	54.47	46.92	48.14	44.22	50.46	50.85
Cash expenses:								
Feed--								
Grain	16.94	18.32	14.83	18.85	19.22	15.69	12.15	9.68
Protein supplements	11.68	12.27	11.40	12.19	11.26	9.13	9.88	10.31
Pasture	.05	.05	.05	.04	.04	.03	.03	.03
Total feed costs	28.67	30.64	26.28	31.08	30.52	24.85	22.06	20.02
Other--								
Veterinary and medicine	.47	.50	.51	.53	.54	.53	.55	.56
Livestock hauling	.10	.12	.12	.13	.13	.13	.13	.13
Marketing	.30	.33	.36	.33	.35	.33	.35	.36
Bedding	.12	.18	.15	.15	.15	.15	.15	.15
Custom feed mixing	0	0	0	0	0	0	0	0
Fuel, lube, and electricity	1.77	2.06	2.06	1.96	1.81	1.74	1.67	1.64
Machinery and building repairs	2.06	2.25	2.35	2.45	2.34	2.38	2.32	2.34
Hired labor	.85	.99	.98	1.08	1.23	1.34	1.19	1.26
Manure credit	-.19	-.20	-.20	-.19	-.21	-.20	-.19	-.17
Total, variable cash expenses	34.15	36.87	32.61	37.52	36.86	31.25	28.23	26.29
General farm overhead	1.72	2.12	2.66	2.47	2.37	2.14	3.53	4.07
Taxes and insurance	.61	.67	.69	.78	.70	.83	.73	.74
Interest	4.75	5.85	8.28	5.65	7.00	5.41	6.05	3.56
Total, fixed cash expenses	7.08	8.64	11.63	8.90	10.07	8.38	10.31	8.37
Total, cash expenses	41.23	45.51	44.24	46.42	46.93	39.63	38.54	34.66
Cash receipts less cash expenses	-1.63	-1.64	10.23	.50	1.21	4.59	11.92	16.19
Capital replacement	5.15	5.59	5.81	6.19	5.68	5.65	5.58	5.59
Total, cash expenses and replacement	46.38	51.10	50.05	52.61	52.61	45.28	44.12	40.25
Net cash returns	-6.78	-7.23	4.42	-5.69	-4.47	-1.06	6.34	10.60

Table 59B--U.S. farrow-to-finish production economic costs and returns, all sizes of operation, 1972-87--continued

Item	1980	1981	1982	1983	1984	1985	1986	1987
<u>Dollars per cwt</u>								
Total, cash receipts	39.60	43.87	54.47	46.92	48.14	44.22	50.46	50.85
Economic (full ownership) costs:								
Variable cash expenses	34.15	36.87	32.61	37.52	36.86	31.25	28.23	26.29
General farm overhead	1.72	2.12	2.66	2.47	2.37	2.14	3.53	4.07
Taxes and insurance	.61	.67	.69	.78	.70	.83	.73	.74
Capital replacement	5.15	5.59	5.81	6.19	5.68	5.65	5.58	5.59
Operating capital	.97	1.27	.90	.82	.90	.60	.38	.40
Other nonland capital	1.70	1.60	1.57	1.47	1.17	1.11	1.08	1.21
Land	.15	.15	.14	.13	.10	.08	.06	.06
Unpaid labor	4.41	4.90	4.48	4.78	4.50	4.52	4.36	4.50
Total, economic costs	48.86	53.17	48.87	54.16	52.28	46.18	43.95	42.86
Residual returns to management and risk	-9.26	-9.30	5.60	-7.24	-4.14	-1.96	6.51	7.99



Table 60A--U.S. feeder pig production cash costs and returns, all sizes of operation, 1972-87

Item	1972	1973	1974	1975	1976	1977	1978	1979
<u>Dollars per cwt</u>								
Cash receipts:								
Feeder pigs	39.88	60.22	52.52	72.26	58.87	61.42	78.83	58.43
Cull sows	4.57	7.06	5.87	8.57	6.78	7.07	8.78	7.52
Total	44.45	67.28	58.40	80.83	65.65	68.49	87.61	65.95
Cash expenses:								
Feed--								
Grain	9.35	15.11	23.35	21.59	19.51	16.23	16.99	19.07
Protein supplements	9.32	20.26	14.94	12.24	12.90	15.00	14.24	15.83
Pasture	.14	.16	.17	.17	.21	.17	.18	.20
Total feed costs	18.81	35.54	38.46	34.00	32.62	31.40	31.41	35.10
Other--								
Veterinary and medicine	.90	.92	1.05	1.41	1.37	1.38	1.41	1.51
Livestock hauling	.07	.08	.09	.10	.11	.12	.13	.14
Marketing	.88	.93	1.03	1.13	1.29	1.27	1.46	1.36
Bedding	.13	.16	.21	.22	.20	.22	.24	.27
Custom feed mixing	.72	.77	.85	.93	.97	1.05	1.13	1.26
Fuel, lube, and electricity	1.90	2.01	2.78	3.10	3.27	3.52	3.69	4.82
Machinery and building repairs	2.22	2.35	2.61	2.87	3.22	3.22	3.34	3.70
Hired labor	.83	.91	1.04	1.12	1.23	1.32	1.41	1.54
Manure credit	-.07	-.07	-.08	-.09	-.11	-.10	-.10	-.11
Total, variable cash expenses	26.39	43.58	48.04	44.78	44.17	43.40	44.12	49.59
General farm overhead	1.42	1.50	1.67	1.83	1.85	2.06	2.82	2.40
Taxes and insurance	1.02	1.05	1.10	1.18	1.20	1.36	1.47	1.71
Interest	3.08	3.61	4.26	5.05	6.47	6.56	8.44	7.05
Total, fixed cash expenses	5.52	6.16	7.03	8.07	9.52	9.98	12.73	11.16
Total, cash expenses	31.92	49.74	55.07	52.85	53.69	53.38	56.85	60.75
Cash receipts less cash expenses	12.54	17.54	3.32	27.98	11.96	15.11	30.76	5.20
Capital replacement	5.81	6.52	4.99	9.17	9.47	10.19	11.26	13.36
Total, cash expenses and replacement	37.72	56.26	60.06	62.02	63.16	63.57	68.11	74.11
Net cash receipts	6.73	11.02	-1.67	18.81	2.49	4.92	19.50	-8.16

Continued--

Table 60B--U.S. feeder pig production economic costs and returns, all sizes of operation, 1972-87

Item	1972	1973	1974	1975	1976	1977	1978	1979
<u>Dollars per cwt</u>								
Total, cash receipts	44.45	67.28	58.40	80.83	65.65	68.49	87.61	65.95
Economic (full ownership) costs:								
Variable cash expenses	26.39	43.58	48.04	44.78	44.17	43.40	44.12	49.59
General farm overhead	1.42	1.50	1.67	1.83	1.85	2.06	2.82	2.40
Taxes and insurance	1.02	1.05	1.10	1.18	1.20	1.36	1.47	1.71
Capital replacement	5.81	6.52	4.99	9.17	9.47	10.19	11.26	13.36
Operating capital	.29	.78	.95	.69	.58	.60	.84	1.24
Other nonland capital	3.24	3.42	3.72	4.07	4.39	4.20	4.08	4.04
Land	.21	.25	.37	.44	.50	.56	.59	.67
Unpaid labor	8.45	9.25	10.59	11.40	12.46	13.41	14.34	15.67
Total, economic costs	46.83	66.36	71.43	73.57	74.62	75.78	79.52	88.68
Residual returns to management and risk	-2.38	.92	-13.04	7.27	-8.97	-7.29	8.09	-22.73

Continued--

Table 60A--U.S. feeder pig production cash costs and returns, all sizes of operation,  
1972-87--continued

Item	1980	1981	1982	1983	1984	1985	1986	1987
<u>Dollars per cwt</u>								
Cash receipts:								
Feeder pigs	51.28	60.87	85.67	61.73	66.60	66.48	76.77	78.72
Cull sows	6.85	7.62	9.56	7.78	8.04	7.25	8.39	8.07
Total	58.13	68.49	95.23	69.51	74.64	73.73	85.16	86.79
Cash expenses:								
Feed--								
Grain	21.54	23.20	18.73	23.79	24.00	19.50	15.14	12.03
Protein supplements	17.86	18.77	17.59	18.63	17.40	14.61	15.72	16.39
Pasture	.22	.22	.22	.19	.17	.15	.13	.12
Total feed costs	39.62	42.19	36.54	42.61	41.57	34.26	30.99	28.54
Other--								
Veterinary and medicine	1.62	1.55	1.62	1.67	1.53	1.47	1.50	1.51
Livestock hauling	.16	.18	.19	.20	.20	.20	.20	.19
Marketing	1.35	1.49	1.59	1.48	1.62	1.51	1.63	1.66
Bedding	.30	.46	.38	.39	.37	.37	.37	.37
Custom feed mixing	1.40	1.46	1.46	1.44	1.33	1.24	1.19	1.19
Fuel, lube, and electricity	6.61	7.68	7.73	7.49	6.80	6.69	6.42	6.36
Machinery and building repairs	4.31	4.72	4.93	5.14	4.78	4.82	4.67	4.72
Hired labor	1.66	1.87	1.86	2.05	2.62	2.90	2.86	3.10
Manure credit	-.14	-.15	-.15	-.15	-.16	-.15	-.14	-.13
Total, variable cash expenses	56.89	61.45	56.15	62.32	60.66	53.31	49.69	47.51
General farm overhead	2.42	3.16	4.17	4.15	4.85	4.79	5.96	6.94
Taxes and insurance	1.63	1.77	1.89	2.10	1.88	1.88	1.87	1.88
Interest	7.00	9.17	14.56	8.43	10.84	10.84	10.22	6.08
Total, fixed cash expenses	11.05	14.10	20.62	14.68	17.57	17.51	18.05	14.90
Total, cash expenses	67.94	75.55	76.77	77.00	78.23	70.82	67.74	62.41
Cash receipts less cash expenses	-9.81	-7.06	18.46	-7.49	-3.59	2.91	17.42	24.38
Capital replacement	10.77	11.82	12.36	13.35	11.90	11.90	11.64	11.68
Total, cash expenses and replacement	78.71	87.37	89.13	90.35	90.13	82.72	79.38	74.09
Net cash receipts	-20.58	-18.88	6.10	-20.84	-15.49	-8.99	5.78	12.70

Table 60B--U.S. feeder pig production economic costs and returns, all sizes of operation,  
1972-87--continued

Item	1980	1981	1982	1983	1984	1985	1986	1987
<u>Dollars per cwt</u>								
Total, cash receipts	58.13	68.49	95.23	69.51	74.64	73.73	85.16	86.79
Economic (full ownership) costs:								
Variable cash expenses	56.89	61.45	56.15	62.32	60.66	53.31	49.69	47.51
General farm overhead	2.42	3.16	4.17	4.15	4.85	4.79	5.96	6.94
Taxes and insurance	1.63	1.77	1.89	2.10	1.88	1.88	1.87	1.88
Capital replacement	10.77	11.82	12.36	13.35	11.90	11.90	11.64	11.68
Operating capital	1.62	2.12	1.56	1.36	1.49	1.02	.67	.72
Other nonland capital	3.96	3.74	3.66	3.44	2.74	2.74	2.48	2.77
Land	.75	.77	.72	.64	.50	.41	.30	.32
Unpaid labor	16.89	18.37	16.86	17.95	16.79	16.79	16.62	17.23
Total, economic costs	94.93	103.19	97.36	105.32	100.80	92.84	89.23	89.05
Residual returns to management and risk	-36.80	-34.70	-2.13	-35.81	-26.16	-19.11	-4.07	-2.26

Table 61A--U.S. feeder pig finishing production cash costs and returns, all sizes of operation, 1972-87

Item	1972	1973	1974	1975	1976	1977	1978	1979
<u>Dollars per cwt</u>								
Cash receipts:								
Slaughter hogs	26.02	39.29	34.26	47.14	47.98	40.07	47.82	46.92
Total	26.02	39.29	34.26	47.14	47.98	40.07	47.82	46.92
Cash expenses:								
Feeders--								
Feeder pigs	10.34	13.95	9.81	17.48	23.71	13.82	19.31	23.18
Feed--								
Grain	6.66	10.75	16.61	15.36	12.79	11.55	10.47	11.33
Protein supplements	5.61	12.21	9.01	7.38	6.98	9.04	8.08	9.04
Pasture	.01	.01	.01	.01	.01	.01	.01	.01
Total feed costs	12.28	22.97	25.63	22.75	19.78	20.60	18.56	20.38
Other--								
Veterinary and medicine	.22	.23	.26	.35	.34	.34	.35	.37
Livestock hauling	.05	.06	.07	.08	.08	.09	.09	.11
Marketing	.23	.25	.28	.30	.35	.34	.39	.36
Bedding	.03	.04	.06	.06	.05	.06	.06	.07
Custom feed mixing	.06	.06	.07	.07	.07	.08	.08	.09
Fuel, lube, and electricity	.39	.42	.58	.64	.68	.73	.77	1.01
Machinery and building repairs	.70	.74	.82	.90	1.01	1.01	1.05	1.16
Hired labor	.17	.19	.21	.23	.25	.27	.29	.32
Manure credit	-.07	-.07	-.08	-.09	-.11	-.10	-.10	-.11
Total, variable cash expenses	24.41	38.83	37.69	42.77	46.21	37.24	40.85	46.94
General farm overhead	.86	.91	1.01	1.10	1.39	1.24	1.58	1.76
Taxes and insurance	1.28	1.32	1.39	1.49	1.54	1.71	1.93	3.18
Interest	1.74	2.04	2.41	2.85	4.55	3.70	4.50	4.94
Total, fixed cash expenses	3.88	4.26	4.80	5.44	7.48	6.65	8.01	9.88
Total, cash expenses	28.29	43.09	42.49	48.20	53.69	43.89	48.86	56.82
Cash receipts less cash expenses	-2.27	-3.80	-8.23	-1.06	-5.71	-3.82	-1.04	-9.90
Capital replacement	1.41	1.59	1.22	2.23	2.65	2.48	2.47	2.91
Total, cash expenses and replacement	29.70	44.68	43.71	50.44	56.34	46.37	51.33	59.73
Net cash returns	-3.68	-5.39	-9.44	-3.29	-8.36	-6.30	-3.51	-12.81

Continued--

Table 61B--U.S. feeder pig finishing production economic costs and returns, all sizes of operation, 1972-87

Item	1972	1973	1974	1975	1976	1977	1978	1979
<u>Dollars per cwt</u>								
Total, cash receipts	26.02	39.29	34.26	47.14	47.98	40.07	47.82	46.92
Economic (full ownership) costs:								
Variable cash expenses	24.41	38.83	37.69	42.77	46.21	37.24	40.85	46.94
General farm overhead	.86	.91	1.01	1.10	1.39	1.24	1.58	1.76
Taxes and insurance	1.28	1.32	1.39	1.49	1.54	1.71	1.93	3.18
Capital replacement	1.41	1.59	1.22	2.23	2.65	2.48	2.47	2.91
Operating capital	.18	.46	.50	.44	.41	.34	.52	.78
Other nonland capital	.75	.79	.86	.94	1.02	.97	.94	.94
Land	.01	.02	.02	.03	.03	.04	.04	.04
Unpaid labor	.67	.73	.84	.90	.99	1.06	1.14	1.24
Total, economic costs	29.57	44.64	43.52	49.89	54.24	45.08	49.46	57.80
Residual returns to management and risk	-3.55	-5.36	-9.26	-2.75	-6.26	-5.01	-1.64	-10.88

Continued--



Table 61A--U.S. feeder pig finishing production cash costs and returns, all sizes of operation, 1972-87--continued

Item	1980	1981	1982	1983	1984	1985	1986	1987
<u>Dollars per cwt</u>								
Cash receipts:								
Slaughter hogs	39.30	43.86	54.53	47.34	48.42	44.61	50.49	50.98
Total	39.30	43.86	54.53	47.34	48.42	44.61	50.49	50.98
Cash expenses:								
Feeders--								
Feeder pigs	13.16	17.54	22.40	20.05	17.33	18.76	19.94	20.44
Feed--								
Grain	11.65	12.59	10.19	12.97	13.21	10.79	8.37	6.67
Protein supplements	6.55	6.89	6.38	6.81	6.31	5.17	5.58	5.87
Pasture	.02	.02	.02	.02	.02	.01	.01	.01
Total feed costs	18.22	19.50	16.59	19.80	19.54	15.97	13.96	12.55
Other--								
Veterinary and medicine	.40	.43	.44	.46	.46	.46	.47	.48
Livestock hauling	.12	.14	.15	.16	.16	.16	.16	.16
Marketing	.36	.39	.42	.39	.42	.39	.42	.43
Bedding	.08	.11	.10	.10	.10	.10	.10	.10
Custom feed mixing	.10	.10	.09	.09	.08	.07	.06	.07
Fuel, lube, and electricity	1.38	1.50	1.49	1.38	1.15	1.05	.99	.98
Machinery and building repairs	1.35	1.50	1.59	1.66	1.58	1.63	1.57	1.60
Hired labor	.34	.38	.36	.39	.40	.42	.41	.43
Manure credit	-.14	-.15	-.16	-.15	-.16	-.15	-.14	-.13
Total, variable cash expenses	35.37	41.44	43.47	44.33	41.06	38.86	37.94	37.11
General farm overhead	1.68	2.08	2.68	1.99	2.74	2.44	3.53	4.08
Taxes and insurance	.32	.36	.39	.42	.40	.43	.46	.47
Interest	4.63	5.90	8.27	5.73	7.03	5.45	6.06	3.57
Total, fixed cash expenses	6.63	8.34	11.34	8.14	10.17	8.32	10.05	8.12
Total, cash expenses	42.00	49.78	54.81	52.47	51.23	47.18	47.99	45.23
Cash receipts less cash expenses	-2.70	-5.92	-0.28	-5.13	-2.81	-2.57	2.50	5.75
Capital replacement	2.51	2.77	2.92	3.04	2.93	3.00	2.95	2.99
Total, cash expenses and replacement	44.51	52.55	57.73	55.51	54.16	50.18	50.94	48.22
Net cash returns	-5.21	-8.69	-3.20	-8.17	-5.74	-5.57	-.45	2.76

Table 61B--U.S. feeder pig finishing production economic costs and returns, all sizes of operation, 1972-87--continued

Item	1980	1981	1982	1983	1984	1985	1986	1987
<u>Dollars per cwt</u>								
Total, cash receipts	39.30	43.86	54.53	47.34	48.42	44.61	50.49	50.98
Economic (full ownership) costs:								
Variable cash expenses	35.37	41.44	43.47	44.33	41.06	38.86	37.94	37.11
General farm overhead	1.68	2.08	2.68	1.99	2.74	2.44	3.53	4.08
Taxes and insurance	.32	.36	.39	.42	.40	.43	.46	.47
Capital replacement	2.51	2.77	2.92	3.04	2.93	3.00	2.95	2.99
Operating capital	.67	.95	.80	.65	.67	.50	.34	.37
Other nonland capital	.92	.87	.85	.80	.63	.60	.58	.65
Land	.05	.05	.05	.04	.03	.03	.02	.02
Unpaid labor	1.34	1.46	1.34	1.42	1.37	1.38	1.33	1.39
Total, economic costs	42.86	49.98	52.50	52.69	49.83	47.23	47.15	47.08
Residual returns to management and risk	-3.56	-6.12	2.03	-5.35	-1.41	-2.62	3.34	3.90

Table 62A--U.S. sheep production cash costs and returns, all sizes of operation, 1972-87

Item	1972	1973	1974	1975	1976	1977	1978	1979
<u>Dollars per ewe</u>								
Cash receipts								
Slaughter lambs	9.85	12.00	13.00	14.53	15.65	17.46	19.91	21.03
Feeder lambs	6.99	8.58	8.06	9.27	11.35	12.57	17.72	18.41
Cull ewes	1.72	3.30	2.63	2.56	3.30	3.45	4.70	5.52
Wool	2.60	6.15	4.39	3.32	4.88	5.35	5.54	6.42
Wool payment	2.75	.00	.96	2.03	.47	2.01	2.49	2.13
Unshorn lamb payment	.75	.00	.26	.55	.13	.55	.66	.71
Total	24.66	30.03	29.32	32.26	35.78	41.40	51.02	54.21
Cash expenses:								
Feed--								
Grain	1.11	1.79	2.77	2.56	2.36	1.92	1.99	2.24
Protein supplements	1.76	3.82	2.82	2.31	2.31	2.83	2.85	3.21
Salt and minerals	.13	.14	.15	.17	.19	.21	.23	.26
Hay	2.24	2.55	2.99	3.74	3.89	2.89	2.69	2.45
Pasture	1.81	2.07	2.14	2.14	2.19	2.18	2.41	2.70
Public grazing	1.25	1.31	1.41	1.41	1.65	.73	.73	.93
Crop residue	.05	.05	.05	.05	.05	.05	.05	.04
Total feed costs	8.34	11.74	12.34	12.39	12.64	10.82	10.95	11.84
Other--								
Veterinary and medicine	.60	.62	.59	.62	.59	.61	.66	.73
Livestock hauling	.66	.73	.66	.72	.66	.71	.76	.87
Marketing	.15	.16	.15	.16	.15	.16	.17	.19
Ram death loss	.13	.14	.15	.17	.18	.19	.26	.34
Shearing and tagging	.58	.62	.68	.75	.79	.84	.90	.98
Fuel, lube, and electricity	.50	.53	.74	.82	.87	.93	.98	1.28
Machinery and building repairs	2.57	2.62	2.82	2.98	2.87	1.22	1.32	1.45
Hired labor	2.72	2.98	3.41	3.67	4.15	4.32	4.62	5.05
Miscellaneous	.44	.47	.52	.57	.60	.64	.69	.77
Total, variable cash expenses	16.70	20.60	22.07	22.84	23.49	20.44	21.31	23.51
General farm overhead	.98	1.33	1.19	1.33	1.57	1.82	2.40	2.89
Taxes and insurance	.90	.92	.97	1.04	1.26	1.19	1.20	1.45
Interest	1.05	1.52	1.31	1.46	2.20	2.33	3.96	5.56
Total, fixed cash expenses	2.93	3.78	3.47	3.82	5.03	5.35	7.57	9.90
Total, cash expenses	19.63	24.38	25.54	26.66	28.52	25.79	28.87	33.41
Cash receipts less cash expenses	5.03	5.64	3.78	5.60	7.26	15.61	22.14	20.80
Capital replacement	2.19	2.32	2.52	2.75	2.90	2.84	3.89	4.90
Total, cash expenses and replacement	21.82	26.70	28.06	29.42	31.42	28.64	32.76	38.31
Net cash receipts	2.84	3.33	1.26	2.84	4.36	12.76	18.26	15.90

Continued--

Table 62B--U.S. sheep production economic costs and returns, all sizes of operation, 1972-87

Item	1972	1973	1974	1975	1976	1977	1978	1979
<u>Dollars per ewe</u>								
Total, cash receipts	24.66	30.03	29.32	32.26	35.78	41.40	51.02	54.21
Economic (full ownership) costs:								
Variable cash expenses	16.70	20.60	22.07	22.84	23.49	20.44	21.31	23.51
General farm overhead	.98	1.33	1.19	1.33	1.57	1.82	2.40	2.89
Taxes and insurance	.90	.92	.97	1.04	1.26	1.19	1.20	1.45
Capital replacement	2.19	2.32	2.52	2.75	2.90	2.84	3.89	4.90
Operating capital	.37	.74	.87	.70	.62	.56	.81	1.18
Other nonland capital	1.58	1.67	1.82	1.99	2.09	2.05	2.81	3.54
Land	3.10	3.76	4.86	5.59	6.07	6.44	6.87	7.95
Unpaid labor	4.12	4.62	5.42	5.75	6.42	6.58	6.75	7.38
Total, economic costs	29.96	35.96	39.72	41.98	44.42	41.93	46.03	52.79
Residual returns to management and risk	-5.30	-5.93	-10.40	-9.72	-8.64	-.53	4.99	1.42

Continued--

Table 62A--U.S. sheep production cash costs and returns, all sizes of operation,  
1972-87--continued

Item	1980	1981	1982	1983	1984	1985	1986	1987
<u>Dollars per ewe</u>								
Cash receipts								
Slaughter lambs	20.46	16.03	16.60	16.39	19.93	21.58	20.84	22.64
Feeder lambs	15.74	13.30	13.49	12.30	15.02	18.48	18.76	23.19
Cull ewes	3.55	3.43	3.05	2.17	3.20	6.06	5.97	6.69
Wool	6.55	7.45	6.28	6.72	8.81	6.84	7.34	10.05
Wool payment	3.19	6.30	10.05	9.47	9.47	10.99	12.22	9.77
Unshorn lamb payment	.76	.88	1.50	1.56	1.81	2.21	2.42	1.94
Total	50.25	47.39	50.97	48.61	58.24	66.16	67.55	74.28
Cash expenses:								
Feed--								
Grain	2.56	2.13	2.14	2.38	2.52	2.01	1.60	1.39
Protein supplements	3.64	3.38	3.16	3.60	3.39	3.40	3.68	3.80
Salt and minerals	.32	.35	.37	.38	.38	.40	.40	.40
Hay	2.93	3.53	3.71	3.65	3.74	3.90	2.93	2.85
Pasture	3.05	3.19	3.11	3.16	3.43	3.31	3.29	2.89
Public grazing	1.13	1.11	.91	.70	.71	.67	.68	.67
Crop residue	.05	.06	.05	.06	.06	.05	.05	.05
Total feed costs	13.68	13.75	13.45	13.93	14.23	13.74	12.63	12.05
Other--								
Veterinary and medicine	.83	.91	.98	.99	1.04	1.05	1.08	1.10
Livestock hauling	1.00	1.12	1.18	1.20	1.25	1.28	1.25	1.23
Marketing	.22	.24	.26	.27	.28	.29	.29	.30
Ram death loss	.33	.31	.29	.28	.27	.27	.27	.33
Shearing and tagging	1.06	1.14	1.18	1.21	1.23	1.24	1.30	1.20
Fuel, lube, and electricity	1.75	1.98	1.93	1.82	1.49	1.53	1.12	1.17
Machinery and building repairs	1.59	1.74	2.19	2.29	2.26	2.39	2.30	2.35
Hired labor	5.44	5.83	6.05	6.22	6.34	6.49	6.78	6.53
Miscellaneous	.87	.96	1.02	1.04	1.08	1.12	1.15	1.17
Total, variable cash expenses	26.77	27.98	28.53	29.25	29.47	29.40	28.17	27.43
General farm overhead	3.06	3.20	4.47	2.86	3.74	3.25	3.38	4.46
Taxes and insurance	1.55	1.57	1.80	1.82	1.70	1.82	2.38	2.75
Interest	5.84	6.69	6.55	5.32	5.99	6.87	7.43	6.69
Total, fixed cash expenses	10.45	11.47	12.82	10.00	11.43	11.94	13.19	13.90
Total, cash expenses	37.22	39.45	41.35	39.25	40.90	41.34	41.36	41.33
Cash receipts less cash expenses	13.03	7.94	9.62	9.36	17.34	24.82	26.19	32.95
Capital replacement	5.12	5.69	6.58	6.95	7.38	7.61	7.53	7.83
Total, cash expenses and replacement	42.34	45.14	47.93	46.20	48.28	48.95	48.89	49.16
Net cash receipts	7.91	2.25	3.04	2.41	9.96	17.21	18.66	25.12

Table 62B--U.S. sheep production economic costs and returns, all sizes of operation,  
1972-87--continued

Item	1980	1981	1982	1983	1984	1985	1986	1987
<u>Dollars per ewe</u>								
Total, cash receipts	50.25	47.39	50.97	48.61	58.24	66.16	67.55	74.28
Economic (full ownership) costs:								
Variable cash expenses	26.77	27.98	28.53	29.25	29.47	29.40	28.17	27.43
General farm overhead	3.06	3.20	4.47	2.86	3.74	3.25	3.38	4.46
Taxes and insurance	1.55	1.57	1.80	1.82	1.70	1.82	2.38	2.75
Capital replacement	5.12	5.69	6.58	6.95	7.38	7.61	7.53	7.83
Operating capital	1.52	1.93	1.58	1.28	1.44	1.13	.76	.83
Other nonland capital	4.63	4.11	4.52	4.36	4.95	2.72	2.72	3.24
Land	9.44	9.75	10.13	9.26	8.86	6.56	5.44	5.81
Unpaid labor	6.40	6.97	7.14	7.33	7.70	7.77	8.13	7.48
Total, economic costs	58.49	61.21	64.75	63.11	65.24	60.26	58.51	59.83
Residual returns to management and risk	-8.24	-13.82	-13.78	-14.50	-7.00	5.90	9.04	14.45



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**Which of the following statements are true?**

**True    False**

- |                          |                          |   |
|--------------------------|--------------------------|---|
| <input type="checkbox"/> | <input type="checkbox"/> | <i>Farming is the main activity in rural America.</i>   |
| <input type="checkbox"/> | <input type="checkbox"/> | <i>Most of our food comes from small family farms where the farmer is having a tough time making a decent living.</i> |
| <input type="checkbox"/> | <input type="checkbox"/> | <i>America is losing the family farm.</i>   |
| <input type="checkbox"/> | <input type="checkbox"/> | <i>Most farmers today are either big corporations controlled by major companies, or poor and fighting to survive.</i> |

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